ABSTRACT

Title of Dissertation: WOMEN FACULTY AGENCY: A CASE STUDY OF TWO UNIVERSITIES IN RUSSIA

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Doctor of Philosophy, 2019

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The purpose of the study was to explore professional and personal challenges experienced by women faculty in Russia and analyze organizational factors that influence their sense of agency. Expanding on O'Meara, Campbell & Terosky (2011) theoretical framework on agency, this research suggests differentiating two forms of agency experienced by women faculty in Russia, professional agency and personal agency.

Professional agency is shaped by a woman's strong confidence in her capacity in professional fulfillment. Personal agency reflects a woman's confidence to build relationships in her family that help her manage multiple roles in her personal and professional life, therefore, producing a strong mediating effect on professional agency perspectives and behavior and work satisfaction.

The use of structural equation modeling (SEM) revealed strong positive effects of organizational factors such as promotion procedures, collegiality, workload distribution policies and practices, resources and support, and work-family balance factor on women's agency perspectives and behavior, and a strong effect of agency behavior on faculty outcomes such as academic rank promotion and leadership opportunities, research productivity and overall satisfaction with their careers. The SEM model did not find gender differences in the above relationships, suggesting that the effect of organizational factors on faculty agency and outcomes is significant regardless of gender.

Survey data also provided a broader picture of work environments of the two institutions and helped to gain understanding of which aspects of faculty work reveal significant differences by gender, rank, discipline, and type of institution, and whether women faculty in Russia feel more or less agentic than men faculty. In addition to pre-defined categories of organizational factors that influence faculty career, interviews with women faculty created space for emerging themes of issues shaping women experiences in their work environments and helped to identify what agentic perspectives and behaviors women faculty assume in their career that are pertinent to the Russian context.

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by

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Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2019

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Dedication

To my parents who have always believed in me and have set an example of commitment and passion for the chosen profession.

Acknowledgements

As I was moving from Russia to the United States in 2010 for my Fulbright master's program, I did not expect that it would take me on this long road full of challenges and opportunities, turning points and learning experiences. This journey would not be as memorable and complete if not accompanied by all the people who I was fortunate to meet.

I would like to acknowledge my dissertation chair and advisor, Dr. Stromquist, who guided me through this learning process spanning for all these years, for personal and professional inspiration, for thoughtful and meaningful discussions during class times, for critical thinking, and for constant invaluable feedback on this work. I have always admired your strong personality.

Dr. O'Meara, thank you for providing me with an opportunity to work with you and to learn about women faculty issues in this university and across the United States, that sparked my interest and lead to an idea of this study. I immensely appreciate the opportunities to work in research teams with wonderful people and bright scholars and contribute to publications. Your energy to accomplish multiple goals, projects, and roles, and your achievements remind me in times of despair to stand up and keep going.

I want to acknowledge remarkable professors in my program, Dr. Klees and Dr. Lin, for the knowledge and skills I developed in your classes and for graciously serving on my committee. Thank you, Dr. Klees, for enriching debates on political and social justice, inequalities and social change, and for teaching to take stands.

Thank you, Dr. Lin, for fruitful conversations in your classes and bringing me to think about cultural influences in my study.

Dr. Wang, thank you for being available to join my committee the very last moment. I immensely appreciate your time and help.

Dr. Jiao, thank you for your feedback on the quantitative part of my proposal. I would like to extend a special thanks to you and to the entire EDMS team of professors, including Dr. Hancock, Dr. Harring, Dr. Stapleton, and Dr. Yang, who lead me through the journey of statistical methods and made it exciting. Without the knowledge and skills that I gained in all of your classes, this dissertation would not be possible.

To my parents, thank you for always believing in me, being my role models and instilling in me persistence and determination.

To all my friends and classmates, whom I was grateful to meet, study, and share memorable moments with, who helped to make the most of my experience here and who supported me through my long road of graduate studies: Yadviga, Anna and Konstantin, Timur and Dilyara, Alexander and Maria, Irina, Leysan, Melissa, Lina, Caitlin, Kristen, Heather, Cecilia, Denis, Raef, Aram, Davit, Yali, Luanjiao, Changha, Olga, Nof, Yulia,Tamara, Olesya, and many others.

Last but not least, I would like to thank my former university colleagues and study participants for helping me to make this happen. You opened doors for me to collect my data and you trusted your experiences in our conversations.

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Chapter 1: Introduction

Identifying Gender Inequalities

Enactment of women's rights in Russia goes back to the beginning of the Soviet time when women's labor, civil and marital rights, equal pay, and right to education were first established in the USSR constitution in 1918. Since then, when equality between men and women was proclaimed for the first time in the country, women have made remarkable progress in instituting their economic, social, civil, political, and religious rights.

Today, in many countries women's share of the overall national workforce is larger than men's. According to the World Bank, in 1990 the labor force participation rate (percent of female population ages 15+) in Central Europe was 53.3%, 54% in Central Asia, 69.4% in East Asia and Pacific, 53.2% in Caribbean small states, 58.9% in Sub-Saharan Africa, and 52.2% total in the world (World DataBank, 2016). In the 20th century, women advanced in their representation in education all over the world: more girls than before are now enrolled in primary, secondary, and tertiary education. In fact, since the 1980s, both in developed and developing countries a surprising phenomenon has been taking place: women consistently surpassed men in numbers of enrollment in higher education and obtaining advanced degrees (IPEDS NCES; England, 2010, Church, 2009; Clark, 2014, Read & Kehm, 2016; ICEF Monitor, 2014).

An upsurge in feminist movements, legislative enactments, and changes in the economy that required incorporation of women in the labor market – all contributed

to causes that spread across the globalizing world, motivating women to pursue higher levels of education. Despite these noticeable achievements, women continue to face inequalities. They are paid less than men, even controlling for the type of job, level of education and responsibility (Babcock & Laschever, 2008; Levine & Dale, 2003; Merino, 2014; Rosstat, 2018). They are kept out of some sectors of the economy: there are feminine and masculine jobs (Denmark, Rabinowitz, & Sechzer, 2016) and women tend to work in those job sectors that are associated with providing care (Schneider, 2004), are less prestigious (Cleveland, Stockdale, & Myrphy, 2000), less valued, and more tedious, such as teaching, nursing, service, agriculture, retail trade, and significantly more women than men work part-time (Etaugh & Bridges, 2015).

Many organizations across the globe for decades have adhered to elimination of inequalities, including those of gender, at workplace. Despite these attempts, gender discrimination remains widespread. The most striking and examined gender inequalities at work are those related to representation, promotion, and salaries. Social, or "soft" sciences, that tend to be perceived as less rigorous, attract more numbers of women; while natural, or "hard" sciences, are dominated by men. Nursing, teaching, social work, counselling and human resources among others have long been considered feminine, or "pink-collared", jobs. Jobs in math, science and technology heavy fields, politics, emergency services, or such as police officers, and even chefs, comedians and sports media, have long been dominated by men.

Another visible inequality is underrepresentation in leadership positions in politics, business, and non-profit areas including education. The low female

promotion rates appear to be the problem for many developed countries. Some countries have established quotas for women in political leadership roles. In Sweden, a political definition of gender equality was formulated in the early 1970s. Since then, equality means when no sex makes up more than 60% of a certain group, meaning that gender balanced representation falls within a 40/60 percent range (Lindberg et al., 2011). As a result, 12 of the 24 government ministers are women, and nearly half of the members of the current parliament in Sweden are also women (44%) (Official Site of Sweden, 2016). However, the legislative regulation of the political representation of women did not influence the economic sector: the numbers of women in business leadership roles remain extremely low, e.g. Scandinavian countries reported only 3% of female CEOs in 145 Nordic large-cap companies (Grant Thornton International Business Report, 2015). Despite being the first country to pass legislation on corporate boards' gender quotas that women must comprise 40% of, none of Norway's 32 large market companies have a female chief executive.

Paradoxically, the glass ceiling is not solely the problem of traditionally masculine jobs, but is heavily pervasive within feminine fields as well. Women's roles are not typically associated with leadership (Claus, Callahan, & Sandlin, 2013) in any type of organization, whether of "soft" or "hard" field. Women are stereotyped as having "soft", feminine skills and lacking "hard", masculine skills required in leadership. While masculinity has been traditionally associated with achievements, assertiveness and material reward, femininity is described as consensus-oriented, cooperation, modesty, caring for the weak and overall quality of life (Hofstede, 1998). These characteristics are often believed to be natural and innate of a female

identity; however, they are as much socially constructed as cultural values and norms: “One is not born woman, one becomes one” (Simone de Beauvoir, 1973). Theories about the role of national culture shaping the perceptions of women in the society (Dorfman as cited by House, Wright, and Aditya, 1997) helped to categorize countries into feminine and masculine societies: Sweden, Norway, and the Netherlands as more feminine European countries, and Hungary and Austria as masculine European countries (Claus, Callahan, & Sandlin, 2013).

While business world requires competitive and assertive skills that are naturally perceived as masculine, nonprofit organizations are expected to pay more attention to gender equality and assumed to have work values more favorable to women. Nonprofits organizations in their mission and goals are commonly ascribed to ideas and values that open more space for women’s work. Women have historically played important role in charitable work (Burbridge, 1994; Preston, 1994; Steinberg & Jacobs, 1994; Themudo, 2009). Education, health, social support, community development, child care, hunger and poverty reduction are among issues that nonprofits work on. While it will not be correct to name these issues as “soft”, they are typically associated with the need for people working on them to have compassion, care, and nurture, which are all considered consciously and subconsciously as natural feminine skills, making women to be expected to be more engaged with social work than men. In turn, these expectations about feminine skills coupled with salaries lower than in “masculine” fields make nonprofit work unappealing to men.

Research has shown that women are better off in nonprofit than for-profit organizations in terms of representation overall and in leadership. In fact, women are overrepresented in the nonprofit sector. Nonprofit sector constitutes approximately 6% of the overall U.S. workforce, with 73% of nonprofit employees being women (The ABC, 2009), compared to 40% and 50% of women in the for-profit and public sectors, respectively (Leete, 2006; Preston & Sacks, 2010). The overrepresentation of women in public and nonprofit sectors is associated with two common factors: better family-friendly practices and men's preference for the for-profit sector due to certain fringe benefits such as insurance plans, savings plans, or pension plans. The nonprofit sector also attracts women by a better access to part-time jobs and shorter workweeks (Lanfranchi & Narcy, 2015). This structure, though, mirrors the traditional patriarchal society and family where men provided financial means for the family, while women acquired the role of housewives taking care of the children and the household. The economic environment of the late 20th century in developed countries impelled to revisit this model by making a necessity for both partners to have a job and provide financial support, thus by making dual-earner families a common phenomenon. However, as women continued to perform their household responsibilities to a greater extent than men, their preferences for part-time jobs and flexible schedules were shaped by this new socio-economic reality. Today, as the number of single or female-headed households, with women as family breadwinner, is rising, and mothers are becoming more educated than fathers, the economic structure with part-time lower pay feminine jobs is no longer responsive to the needs of the transformed society.

In terms of promotion to upper-level management, women in the nonprofit sector generally are perceived to have an advantage over the for-profit sector. In the overall nonprofit sector, 45% of chief executive officers are women (TWHP, 2009). However, the numbers of female leaders begin to shrink as the size and the budget of nonprofit organizations begins to grow: in nonprofits with budgets exceeding $25M, only 21% of CEOs are women (TWHP, 2009). A number of studies provide evidence that underrepresentation of women in upper-level management positions is no exception in nonprofit world (Gibelman, 2000; Sampson & Moore, 2008). Therefore, similarly to the business world, the gender biases persist in nonprofit sector.

Studies show that women in nonprofit organizations make the transition to management less rapidly than men, even when controlling for factors such as age, previous work experience, and nationality (Damman, Heyse, & Mills, 2014). Interestingly, though, the occupation is a significant factor in gender differences: female-dominated occupations (such as nursing) have a lower promotion-to-management rate than male-dominated occupations (such as finances). Two reasons can explain the existing phenomenon: women are directed into occupations with fewer positions of authority (Kraus & Yonay, 2000), and jobs with high composition of women are devalued by organizations (Tomaskovic-Devey, 1993). "Since most women work in female-dominated occupations, and those occupations have less positions of authority, women are less likely to hold authority" (Kraus & Yonay, 2000, p. 594).

Surprisingly, men are often found to have a "glass escalator" in female-dominated fields (Hultin, 2003; Maume, 1999; Williams, 1992). However, other

studies find no such differences for either men or women within their dominated field (Damman, Heyse, & Mills, 2014), which may be indicative of the culture and values shaped by of the specific organization. Organizational context may have "softening" effect on mechanisms that perpetuate gender inequality in promotion rates.

Besides the representation and promotion gender disparities, pay disparity between men and women presents another serious issue in achieving gender equality in the workforce, including nonprofit sector. Although the Equal Pay Act (1963) has been in effect for over 50 years, a wage gap still persists. Because nonprofits are typically fields with higher representation of women and feminine jobs tend to be paid less than masculine jobs, these industries pay all their workers less than for-profits (Cohen & Huffman, 2003; de Ruijter & Huffman, 2003; England et al., 1994). The reduction in pay amount is stronger for men, though, which results in greater equity in earnings. Due to high reliance on intrinsic and altruistic motivation to work in the field of nonprofit, fairness becomes an essential factor and determines equity in wages for workers regardless of gender. In these circumstances, inequitable working conditions and pay would negatively impact work productivity (Ben-Ner, Ren, & Paulson, 2010).

While nonprofit sector typically pays more equitably with respect to gender than for-profit sector – the gender pay gap is approximately 8% smaller in the nonprofit sector (Leete, 2000), disparities still persist within nonprofit organizations and vary widely across fields (Faulk et al., 2013; Lewis & Faulk, 2008; Ruhn & Borkowski, 2000). Even controlling for human capital characteristics, location,

industry, and occupation, women tend to have lower earnings than men in the nonprofit industry (Leete, 2000; Preston & Sacks, 2010; Ruhn & Borkowski, 2000).

A study by Gibelman (2000) of 74 nonprofit agencies with 4,596 employees throughout the United States reveal salary differentials by gender at all degree levels and gender representation disparities by occupation level: women tend to earn less than men at each degree level and occupation level, and women outnumber men at the lowest level position (line workers), while men begin to outnumber women at middle-level management and more than double the number of women at upper-level management. Furthermore, when race/ethnicity is factored in, salary discrepancies become even more evident: women of minority status earn the lowest salaries (Gibelman, 2000).

Furthermore, studies reveal that the salary gender gap is widening over time. As more men continue to hold senior-level positions, they tend to enjoy the benefits of the salary increase more than women. In turn, although more women hold director positions, they saw the real dollar growth in salaries of only 10% over the 1988-2005 period (Sampson & Moore, 2008).

Focus on Women Faculty

University systems are not independent bodies functioning in isolation from these societal structures. They reflect the systemic issues inherent in the society. Historically, women have faced challenges when being recruited for faculty positions, promoted, and paid. Identical issues are experienced by women in non-academic positions, i.e., administrative or management, roles: they are typically loaded with "household" institutional work (Misra et al, 2011; Mitchell & Hesli, 2013; Park,

1996; Porter, 2007), and are less likely to be represented at higher level positions or those that convey prestige and authority (Krefting, 2003; Rhode, 2017).

Slow advancement of women faculty and notably low representation in research universities are issues experienced by women across the world. In case of Russia, women in academia have been well represented, although varying to a certain degree depending on the field of study and the type of institution. However, over the last decade, data show that the situation for women in workplace is worsening: according to the World Economic Forum Report, Russia's ranking in the Gender Gap Index has dropped from 61st to 75th place in one year (2014), meaning the first place having the least gender gap, and did not improve in 2015 (Bekhouche, Hausmann, Tyson, Zahidi, & Ratcheva, 2015).

Additionally, traditional paternalistic family values have been reinforced in Russian society in the last years (Hardwick, 2014). Interestingly, according to the UN data the percent of female labor force participation rate (15+ years) in Russia has in fact been gradually decreasing over the period of 1985 to 2000 from 61.6% to 53.1% (United Nations Statistics Database, accessed in 2016). Finally, recent higher education reforms, restructuring of institutions and optimization of resources contributed to augmented workload, increased demands, insecurity, and related higher levels of stress for faculty. Women faculty early in their career feel even more insecure when taking a maternal leave. However, despite the discouraging shifts, out of a handful of feminism and gender study researchers in Russia very few researchers are focusing on problematizing and highlighting the gendered issues women faculty face in universities.

Understanding Agency

Studying the work environments, along with policies and practices designed to change the environment and address the challenges, requires understanding of women's perceptions of and reactions to these environments and practices, i.e., their agency. Drawing on an extensive literature review of social science research on agency, O'Meara et al. (2011) defined faculty agency as taking perspectives and assuming action to achieve meaningful career goals (O'Meara & Campbell, 2011; Terosky, O'Meara, & Campbell, 2014; O'Meara, 2015) . I apply this definition to my study of challenges that women faculty face in academia in Russia, their work environments, their sense of agency, and how their sense of agency is affected by university and department policies, programs, and organizational practices.

Studying women's experiences of developing and enacting agency helps to understand ways in which academic environments can be improved successfully in order to retain and promote women (O'Meara, 2015; Hart, 2007; Sule, 2011; Ward & Wolf-Wendel, 2012). Research of women's agency has been limited and thus will make a valuable contribution to the literature on gender inequities in academia.

Justification for the Study

While issues of gender equity in academia have been studied extensively for the last decades across countries, they remain underresearched in Russia. Post-Soviet states have enjoyed the achieved gender equality, and discussion of women's rights has been perceived mainly as irrelevant. Despite the seeming parity in many aspects (political, economic, social), women in Russia continue to face inequalities in their professional lives. They remain underrepresented in STEM fields, take longer time to

promotion, and are less likely to pursue higher leadership positions (Romanovsky, 2005, Sillaste, 2004; Pugach, 2015). In the Russian universities selected for this study, women constitute between 18% to 40% of faculty in engineering and science departments (Table 2). Research has shown that field of study effects distribution of workload in the department. Women faculty in STEM fields are more likely to engage in service, teaching and mentoring to a greater extent than men, and are spending less time on research (Misra et al., 2011; Winslow, 2010). Studying this issue in Russia presents an interesting case due to its socialist past and the resulting historically conditioned economic, political, social, and cultural values. Therefore, the study helps to investigate what patterns in work environments can be traced in universities in Russia that are common to institutions in other countries, and also how the context impacts gendered university structures.

Research Questions

Given the focus of the problem, I ask the following questions in this dissertation:

1. What are professional and personal challenges experienced by women faculty in Russia?
2. Do women faculty in Russia have more or less agency than men faculty? What factors affect agency, and how does agency influence faculty outcomes?
3. What agentic perspectives and behaviors do women faculty in Russia assume in their career?
4. What university and department policies, programs, and organizational practices are in place to address challenges experienced by women faculty in Russia and, if present, how do they affect women faculty sense of agency?

Chapter 2: Literature Review

Russian Higher Education Landscape

To provide a comprehensive picture of the current state of higher education in Russia, I analyzed the leading national level policy documents from over the last twenty years, such as the *Federal Law on Higher and Postgraduate Professional Education* (Government of the Russian Federation, 1992), the *Law of the Russian Federation on Education* (Government of the Russian Federation, 1996), the *Federal Law on Introducing Changes in Legislative Acts on Establishing Levels of Higher Professional Education in the Russian Federation* (Government of the Russian Federation, 2007), the *National Doctrine for Education of the Russian Federation* (Government of the Russian Federation, 2000), the *Strategy for Modernization of Russian Education* (Government of the Russian Federation, 2001), the *Priority National Project "Education"* (Ministry of Education and Science of the Russian Federation, 2005), the *Federal Strategic Program for the Development of Education for the Period of 2006–2010* (Government of the Russian Federation, 2005), the *Federal Strategic Program for the Development of Education for the Period of 2011–2015* (Government of the Russian Federation, 2010), the *State Program "The Development of Education" for the Period of 2011–2015* (Government of the Russian Federation, 2013), the *Federal Strategic Program for the Socio-Economic Development of Russia up to* 2020 (Ministry of Economic Development of the Russian Federation, 2008), the *Education in Russia 2008* (statistical report on education indicators and demographics) (Ministry of Education and Science of the Russian Federation, 2009), *Federal Higher Education Standards* (Coordinating

Academic Senate of Higher Education, n.d.), and the Human development report on *Russia in 2015: Development Goals and Policy Priorities* (United Nations Development Programme, 2005), as well as institutional strategic development plans of the two universities selected for the study.

As a political and economic system remarkably distinct from most of the developed countries, Russia, after the demise of the USSR and its economic collapse of the 1990s and during its transition from socialism to capitalism, faced an urgent need to restructure its higher education as a means of re-establishing its power in the world economy. Pursuing integration into the global academic community, Russia has been making efforts to align its higher education policies and practices with European standards, while at the same time emulating the U.S. model.

Modernization has become a strategic goal for the development of the country and has been defined by the federal government as comprising leadership support and new management mechanisms and approaches (Government of the Russian Federation, 2005), building human capital (President's speech, 2008), advancing technology, envisioning the education system as a key vehicle for social development, increasing accountability of higher education to the labor market, and developing the quality assurance system (Government of the Russian Federation, 2010). The national strategic plans for social, economic, and educational development seek to re-position Russia as a leading world power engaged in actions to innovate science, research, and education; provide democratic rights to its citizens; raise the quality of life and reduce poverty; and ensure the national security (Government of the Russian Federation, 2005).

Historically, Russian higher education enjoyed a high reputation for science fields during the USSR years and has been notoriously famous for its brain drain of scientists and academics after the demise of the USSR (Gvozdeva & Vysotskii, 2006). From 1989 to 2005 about 25,000 scientists left Russia permanently and the numbers do not include 30,000 scientists who work on year contracts (Vorobyev, 2005). As a result, in 2005 the number of scientists in Russia constituted only 40% of the early 1990s numbers (Evrika, 2005). However, due to many limitations of available statistical and migration data resources, many researchers argue that these numbers of those who left are not complete and are actually much higher (Ryazantsev & Pismennaya, 2011). The outflow of the Russian academic diaspora goes primarily to the United States, Western Europe, Israel, Canada, Australia, New Zealand, and China.

Under communist ideology, the country placed high emphasis on education and science, allocating a significant part of the federal budget for their development and for expanding student and scholar exchanges. Those measures contributed to raising the prestige of Soviet education, science, and research, nationally and abroad. Within the paradigm of modernization, the focus shifted from political to economic neoliberal ideology with its market-driven policies and reduction of federal budget expenditures (Altbach, 2004; Stromquist, 2013). With the transition to capitalism, increased attention has been given to the fields of business, management, and finance. To these ends, as part of the Priority National Project ‘Education’, the federal government has promoted the idea of establishing world-class business schools that

would be competitive in the global market (Ministry of Education and Science of the Russian Federation, 2005).

The economic crisis of the 1990s, the brain drain, and an overall dramatic decline of federal funding, reinforced by corruption, in the higher education sector, science, technology, and research, along with an underdeveloped system of alternative sources of finance, produced an immensely negative impact on the quality of teaching, learning, research, and professional development. During the 1990s, a number of international organizations, including the World Bank and the OECD, became involved in the educational reforms in Russia, providing financial support and policy guidance, and, as a result, imitating the North American and European models. To increase the national and international recognition and prestige of its institutions, the Russian government designed and implemented a number of reforms in the degree system, types of institutions, and financial mechanisms of its higher education institutions.

In particular, the need to enhance competitiveness in the international arena impelled the Russian government to join Bologna Process. The Bologna agreement was established between European countries with the goal of increasing occupational mobility as well as the international competitiveness of the European system in the knowledge-based global economy environment (Hartmann, 2008). Russia's entry into the Bologna agreement has been one of the major efforts to facilitate the internationalization of higher education institutions across the country through the alignment of their degree system, program requirements, and assessment criteria with

European standards. Signing of the Bologna declaration has constituted one of the "pillars" of educational modernization (Gounko & Smale, 2007).

In compliance with the Bologna Declaration, the Russian government passed changes in the 1992 Federal law (Government of the Russian Federation, 2007) establishing two-level system in the Russian higher education with an introduction of *bachelor's* and *master's* degrees. The plan of action under the Bologna Process also included the introduction of the European Credit Transfer and Accumulation System (ECTS) and a new assessment scale for recognition of the academic workload and learning outcomes. As a result of the transition, the Ministry of Education and Science approved new federal educational standards in program requirements. The introduction of the Unified State Examination known as *EGE* (*Ediniy Gosudarstvenniy Ekzamen*)—a nationwide standardized form of school-leaving examinations and the main form of entrance examinations in universities—contributed to the alignment of the educational structure with the international standards. Altogether, these reforms signaled Russia's participation in the increasing global homogenization of procedures in educational systems.

The adoption of new principles in governance and management, student admissions, degree structure, program requirements, and student and faculty workload distribution in Russia has been exercised through coercive and mimetic processes of isomorphism. As the federal government continues to constitute the primary source of funding, universities are compelled to follow the new policies developed by the Ministry of Education.

The 2000s marked the beginning of strategic planning in education by the Russian government. The idea of the strategic planning can be identified as model-borrowing from the "West," as an increasing number of U.S. institutions, for example, design and follow strategic policies for their development. However, the U.S. strategic plans ironically, in fact, resemble in many ways the Soviet models of centralized planning (Stromquist & Smolentseva, 2011). The federal strategic plans emphasize the importance of increasing the recognition of Russian higher education institutions in the global academic community. Nevertheless, the strategies are not targeted at providing resources to nor encouraging the Russian university system as a whole to strengthen their research profile, innovation, and collaboration with the international academic community. Via a shift in the distribution of the available scarce federal budget resources, the government awards a small number of competitive grants, with more than 50% going to central institutions of Moscow and St. Petersburg and the other half to the institutions of the rest of the country. Very few institutions are given the competitive status of *federal* or *national research* institutions without these grants.

For example, in 2006-2008, the federal government encouraged universities to develop and implement innovative programs. In the first round of competitions, 17 out of 200 institutions were selected with seven universities in Moscow and two universities in St. Petersburg. During the second round, 40 out of 267 universities won the selection, with 15 of them located in Moscow and 4 in St. Petersburg. The experience of conducting a competition among innovative programs resulted in the

idea of a competitive selection of universities – i.e., candidates for national research status – in 2009.

The status of national research institution is obtained on a competitive basis for a 10-year period and is accompanied by budget support. First, in 2008, two universities received the status of national research institution by an exceptional governmental decree: Moscow Engineering Physics Institute (National Research Nuclear University) and State Technological University "Moscow Institute of Steel and Alloys" (National University of Science and Technology). Later, in 2009, 110 universities applied for the first competition organized by the Ministry of Education and Science. Twelve of them were selected as finalists. Six of the finalists were the universities located in Moscow and St. Petersburg. In the second such competition, in 2010, 15 out of 128 received the national research status, with 7 of them from Moscow and St. Petersburg (Ministry of Education and Science of the Russian Federation, 2009, 2010). The federal budget included financing of these initiatives for up to 1.8 billion rubles (approximately US$60 million) for the period of 2010-2014. The grants to national research universities were based on the relevance of the field to national and regional needs, and focused primarily on STEM fields.

With the introduction of competitive federal grants, the universities are also encouraged by the federal government to imitate practices of other universities that are perceived to be more successful and innovative. The excellence initiative "5-100," in effect since May, 2012, has impelled 15 Russian universities, which were selected out of 50 institutions in an open competition, to reach the level of world universities so that at least five of them would enter the top 100 universities in the world rankings

by 2020 (Decree #599 of the President of the Russian Federation, 2012). As a result, with the support of the federal government, universities try to imitate other existing world universities that already achieved those rankings. In the case of National Research Universities, the mimetic isomorphism occurs within the national borders: universities aim to resemble practices of more successful institutions in order to receive federal support and, later, the desired status.

These two processes of coercive and mimetic isomorphism have been accompanied by the practices of normative isomorphism through professional mechanisms, such as student and scholar exchange programs, conferences, and collaborative research and publications. Administrators, academics, and students with direct experience in "Western" higher education (in the countries of Europe and North America) are more likely to support reforms and welcome global education models. However, the limited financial resources provided for academic mobility, the insufficient development of international relations of many regions in the country partially due to the long USSR history of being closed from international visits, inadequate foreign language skills, and a low level of engagement with the international academic community through research significantly decrease the opportunities for normative isomorphism.

The coercive isomorphism of the structural and academic reforms does not automatically increase recognition and competitiveness of institutions throughout the country. Regional institutions often struggle to keep pace with the structural and academic reforms enforced by the government, and experience deficiency of resources, time, and motivation to engage with the international academic and

research community. The vector of influence in the coercive isomorphism is directed in one dimension—from the centralized governing body to the institution—eliminating the return communication and reciprocal interaction with other institutions at the national and international levels.

A historically low level of geographic mobility of the population within the country, coupled with the center-periphery factor in the higher education, perpetuates socio-economic inequality of the society, as the correlation between the level of education and the socio-economic status (SES) is growing stronger. Today, it is more likely that students from families with a higher socio-economic status have access to better schools starting from primary education level and an opportunity to receive additional tutoring instruction in a variety of disciplines. Extra classes and tutoring are gaining significant importance for successful university entry preparation. As socio-economic stratification of the society is deepening and the competition for tuition-free admission is growing, students with higher SES have a higher chance of being admitted to a higher education institution (Bain, 2001), particularly, to a more prestigious institution or field (Shkaratan & Iastrebov, 2012; Zagrebina, 2013).

Since Russia maintained a strong economic and political center for centuries, the educational reforms of the last two decades have contributed to the intensification of the geographical dichotomy between the "center" and the "periphery" in higher education, particularly, via stratification of universities into three types: (1) federal, (2) national research, and (3) mass universities (*Program of Strategic Development for 2009-2012*, case study university). The first two automatically become the most desirable types, since their statuses ensure prestige, national recognition, importance

for national economic development, opportunities for international partnerships, and financial support from the federal government. Federal investments in research and development secure stability and growth for national research universities, while such measures as pulling resources together, merging institutions, units, and departments, cutting faculty and administrative staff, and eliminating duplicate programs and degrees allow for increased efficiency of federal universities.

Although there are many universities in the center that do not belong to leading national institutions, and there are highly recognized institutions in the regions, the power still resides within the clusters of institutions in the center. Economic disparity between the center and the regions (periphery) perpetuates the educational disparity. The economic decline of the 1990s, when major industries faced and continue to experience decay, has weakened the connection between higher education and industry in the regions and increased financial instability and vulnerability of higher education institutions in the regions. The numbers of the federal grants awarded in the last decade also underscore this dichotomy. Unfortunately, the literature has not given deserved attention to this problem that remains a discouraging characteristic of Russian reality today.

Status of Women in Academia in Industrialized Countries

It is indeed a surprising paradox, when in European countries more women than men attend higher education institutions and graduate with a higher education degree, that men hold more positions of senior lecturers and professors than women (European Commission, 2009; Hogskoleverket, 2008; Monroe & Chiu, 2010). Overall in Europe, only 18% of full professors are women (Vernos, 2013). For

instance, as of 2010 in Sweden women constituted only 20% of full professors and 42% of senior lecturers, while women comprise 65% and 51% of university graduates and doctoral degrees, respectively (Statistic Sweden, 2011). Silander et al. (2013) point out that this "vertical" imbalance is not the only issue. A closer look at academic fields reveals further differences – a "horizontal gender balance". For instance, women in Sweden are overrepresented in veterinary medicine (71%), odontology (58%), and are well-represented in humanities (49%), social sciences (47%) and medicine (49%), but underrepresented in natural sciences (32%), mathematics (25%), engineering and technology (22%) (Statistic Sweden, 2011). Horizontal gender imbalance in academia is stronger than vertical gender imbalance, indicating the importance of differences not only between gender and hierarchical position, but also between gender and field (Silander et al., 2013; Ecklund et al., 2010).

Recent studies reported the lack of women at the professorial level in UK higher education institutions (Macfarlane, 2012; Athena SWAN, 2011; Zalevski, Tobbell & Butcher, 2009; UCU, 2013). Women in the UK made up only 19.8% of professors in 2011 (UCU, 2013). The differences in the position levels contribute to the fact that women continue to be paid less. Despite almost half a century since the Equal Pay Act in the UK (1970), a pay gap of 13.5% between men and women still exists in British academia.

Similar to Sweden, the differences become wider when looking across fields. Although the situation has improved since 1991, some fields continue to have alarming gender representation disparities: from one female physics UK professor in

1991 to 36 females out of 650 total in 2012 (The Royal Society of Edinburgh, 2012). Moreover, a fifth of UK university departments have no female professors at all (Howe-Walsh & Turnbull, 2016). At the current 0.75% per year increase rate of women in the professoriate in the UK, it is estimated that it will take 119 years for women to achieve parity in numbers (Savigny, 2014). Australia is no exception: while 44% of their faculty are female, women represent only 28% of senior lecturers. A similar situation is observed in developing countries: e.g., even though the numbers of female academics in South Africa have substantially increased since 1994 and made up over 44% in 2009, they are still underrepresented as the level of seniority increases (Obers, 2014).

As academic women are not expected to excel in research when compared to men (Obers, 2014), they are often burdened with service activities. However, even within service, the roles are gendered. Women are loaded with service roles that require substantial time commitment but no fulfilling recognition for their work. Women are assumed to have "soft" management skills, a common judgement which holds them at junior and less rewarded positions, while promotional panels and interview committees are dominated by senior academic men (White et al., 2011). As a result, only 25% of university vice chancellors in Australia are women (Australian Government, 2014), 14.2% of vice chancellors in Britain (Counting Women in 2012), and only 12% in Germany (Read & Kehm, 2016).

Women Academics in Russia

Despite the astonishing progress that women in Russia have made in the last century in education and in the workforce, serious inequalities continue to affect

Russian women's professional and personal lives. The first and foremost problem is that gender inequalities are not problematized. Gender equality is considered to have been instituted for a long time – since the beginning of Soviet time – and, therefore, gender disparities do not officially exist. Any conversation about women's rights and inequalities is characterized as feministic and neglected.

Russia achieved gender parity in the workforce much earlier than many developed countries – in the beginning of the 20th century. Women were given freedom to continue their education and enter fields of medicine, science and engineering – fields where women are still underrepresented in many countries. However, women in Russia were never encouraged to pursue leadership positions.

Even though women in Russia have been recently making progress in business (Grant Thornton International Business Report, 2015), the gender asymmetry of career advancement in higher levels of financial business continues to persist: women make up 2-4% of higher levels of business leadership positions (Sillaste, 2004). Women remain extremely underrepresented in politics, and face a "glass ceiling" in the non-profit sector overall (Butaeva, 2010; Kapoor, 2016; Zimin, 2013).

In academe women typically fill lower academic ranks and lower management "housekeeping" positions, while most upper level university rank and leadership positions are predominantly held by men. Compared to 26% of university presidents in the United States, the number of female university presidents and provosts in Russia is extremely low – currently including only a handful at most for over 1,200 institutions. The situation has slightly improved since 1999; however, over 60% of

full professors, department chairs, deans, and vice provosts, and almost 90% of provosts in Russia are men (Pugach, 2015).

As discussed earlier, many countries have introduced quotas to achieve gender parity in political leadership. In Russia, there are currently no indicators of such measures or conversations about the need to introduce those. Despite the long established gender equality in many job sectors, people strongly believe that there are certain types of jobs and positions that fit better either men or women. This categorization of jobs is associated with the primary roles that ideal men and women have in the Russian society (Irodovskaya & Shepilevskaya, 2018; Kalte, 2012; Kislovskaya, 2018; Lavrusheva, 2017; Shumilina, 2017; Zimin, 2013).

The Soviet time with its laws of social equality spanning almost a century did not make an attempt to challenge the traditional understanding of family organization and the management of the household. As one Russian female university president put it a few years ago, “many men have not gotten rid of their perception of women’s primary mission as mothers and housewives”. This makes it extremely difficult for a woman to gain respect as a leader. She has to be a recognized professional, wise, with strong character, and be superior in a number of qualities to all men around her, i.e., to be a “man in a skirt” (Romanovsky, 2005). Family becomes a burden, and a woman at such a high leadership position has to either devote herself to the job completely, or become extremely successful in managing these two jobs. At the same time, female leaders without a family are often perceived negatively both by men and women (Butaeva, 2010). As a result, the double burden of a family and a highly

demanding and time-consuming job turns leadership into an impossible dream for most women, and many give up early in their career.

The Soviet era produced a number of important social means to support women in their maternal role. The longest in the world paid maternity leave and a national network of public childcare substantially alleviated childcare conditions for women and facilitated women's entry into economy (Safonova, 2018). At the same time, though, this social support created a double burden of work and family for women because the gender roles and distribution of responsibilities in the family remained untouched (Sperling, 1999).

As Soviet women began to work, while retaining their domestic responsibilities, they perceived the emerged double burden as exploitation rather than emancipation. Feminism was perceived by Soviet women solely in the sense of having the right and the *duty* to work. Family life and roles were not discussed and not questioned. As a result, over time the general idea of feminism began to be received negatively by Soviet women. This explains why existing gender inequalities in Russia are not seen as problems. A popular joke cited by Hedrick Smith, a former Russian correspondent for *The New York Times*, draws a clear line between the two societies in terms of gender structure:

> Under capitalism, women are not liberated because they have no opportunity to work. They have to stay at home, go shopping, do the cooking, keep house and take care of the children. But under socialism, women are liberated. They have the opportunity to work all day and then go home, go shopping, do the cooking, keep house and take care of the children (Smith, 1991, p. 183).

Challenges Faced by Women Academics

Research in the United States has identified a range of barriers to women's retention and progression in their academic careers: gendered institutional cultures (Bailyn, 2003; Barnard et al., 2009; Priola, 2007; Probert, 2005; Rhoton, 2009); formal and informal gendered practices (Kjeldal, Rindfleish, & Sheridan, 2005; van den Brink, Benschop, & Jansen, 2010) that perpetuate overt and concealed discrimination (Gasser & Shaffer, 2014); individual factors (Powell, 2000); and caring responsibilities (Adamo, 2013; Fox, 2010; Fox, Fonseca & Bao, 2011; Goulden, Mason, & Frasch, 2011). However, these barriers have been discussed as discrete occurrences rather than explained using a gender theory framework.

The lack of transparency and accountability in institutional practices enhance gender inequalities beginning from the recruitment process. Women candidates are discriminated against, sometimes in an indirect way, if they are pregnant or have children (Mason, 2008). They may also be viewed as less competent than men (Moss-Racusin et al., 2012).

Research productivity and publication output, which play a crucial role in academic advancement, are in turn influenced by a number of factors, such as gender discrimination in the peer review process (Wenneras & Wold, 1997), domination of male authors in the prestigious first author position (West et al, 2012), overload with teaching and service responsibilities at the expense of time devoted to research, and hurdles when building professional networks in male dominated fields or limited access to professional peer networks or "boys' clubs" (Barnard et al., 2009). As a result of these processes that favor men over women, research productivity of men is

found to be higher than that of women, globally (Obers, 2014). Furthermore, disciplinary differences have a significant impact on research productivity. Women are overrepresented in social sciences, where they have to spend more time on teaching, and underrepresented in STEM disciplines, where faculty tend to spend less time on teaching and supervising (Muller, 2008). Also, research articles in STEM fields are found to be published more quickly than those in social science (Becher & Trowler, 2001).

The shortage of women in senior positions perpetuates the dominant male culture lacking female role models and mentors (Gasser & Shaffer, 2014; Howe-Walsh & Turnbull, 2016). Mentoring has been shown to enhance levels of self-esteem and research productivity and eventually increase representation of women in leadership and senior positions (Obers, 2014). Furthermore, lack of family-friendly policies and practices often results in insurmountable challenges of work-family balance (Darisa et al., 2010; Pell, 1996).

Sexism and harassment have been identified among reasons women are leaving academia, particularly science and technology fields (De Welde & Laursen, 2011; Rosser & Lane, 2002; Settles et al., 2006). Cultural sexism characterizes the working lives of many women in academia and contributes to gendered institutional culture (Savigny, 2014). Women's life experiences play a crucial role in shaping their preferences, behaviors, and perceptions of the complex path on the way to academia and through the "leaky pipeline", i.e., through their academic career that many leave prematurely (Gasser & Shaffer, 2014).

Beyond the institutional system, national policies and the level of autonomy of higher education institutions result in differences in women's status and satisfaction between countries. For instance, British universities are more autonomous, while German institutions can be pressured by the Ministry of Education into achieving specific goals. In the UK, universities are controlled by competition, reputation, and anticipated negative impacts of social media (Read & Kehm, 2016). On the contrary, German vice chancellors emphasize that a critical mass of 30-35 percent of women in the professoriate is needed in order to change the gendered culture, and new open positions are expected to be filled by women.

All of these challenges that women face in academia and in certain fields require them to develop specific individual personality traits such as perseverance, resilience and confidence to succeed. They need these characteristics to a greater extent than men as they enter an environment that is intrinsically hostile to their gender and is filled with inherent systemic disadvantages for women. However, a lack of confidence in their abilities and achievements, or the "imposter phenomenon", is often experienced by women (Imes & Clance, 1984; Taylor, 2009; Joestl et al., 2012). Doubt and fear of failure create another barrier for women to even apply for senior positions.

Women's individual qualities may have a tremendous effect on their decisions and work satisfaction. For instance, women are found to struggle with perfectionism more than men which leads to burnout and negatively influences their productivity (Gasser & Shaffer, 2014).

The identified challenges are reported to impede women's academic careers across countries. For instance, a number of factors have been shown to influence women's career progression in Australian universities: marital status, number of dependent children, elder care, doctoral degree, academic rank, teaching over research, workload, research collaboration, and research funding (Lipton, 2015). The Australian Government's Excellence in Research for Australia (ERA) initiative, established in 2010, declared in 2012 a requirement for institutions to submit gender data to the ministry. Yet, these quality assurance measures have not problematized the gender disparities in research production and challenges for women's progression in research careers: the gender data was further to be used "for reporting and analysis purposes only" but "not form part of the evaluation process" (Australian Government, 2014).

In the case of this Australian initiative, research excellence was viewed through the prism of neoliberal economic principles of individualism, competition, standards, and improvement that are opposite to values of equity, collegiality, and cooperation (Lipton, 2015). As these quality assurance measures are not questioning the existing gendered social structures and continue to label women as having "soft" skills, they reinforce gender biases and inequalities. Similarly, Sturges (1999) found that women perceive career success as an accomplishment and personal achievement rather than as material reward, whereas men perceive career success as a competitive game with an ultimate goal of increasing status and material reward. Consequently, neoliberal ideology and the new knowledge economy support values associated with masculine characteristics. Masculine norms of institutional culture are reinforced by

underrepresentation of women in senior positions (Savigny, 2014). "Appropriate" leadership behavior is often described as masculine. In this masculine environment women are impelled to acquire masculine values and behavior in order to succeed. However, men exhibiting masculine characteristics, e.g. assertiveness in leadership, have also been shown to be viewed more positively than their female colleagues exhibiting similar styles (Ridgeway, 2001).

Despite the seemingly progressive changes in women's status in the society, education, workforce, economy, politics, business and academia, gender disparities persist and it still requires a long road to eradicate them.

Advancing Women Academics

This section examines strategies, initiatives and programs aimed to accelerate the advancement of women academics. Many studies argue that support is a vital tool for success for faculty members in their career pathways, and particularly in their early stages. As widely discussed in the literature, one way to provide such support in the form of socialization, information, and guidance is mentoring (Searby & Collins, 2010). Mentoring has received more attention in recent years, as providing a range of psychological, social and career-related benefits (Bouquillon, Sosik & Lee, 2005). The concept is not new and has been referred to for a few decades as crucial in helping new faculty in the socialization process (Sorcinelli & Jung, 2007), in facilitating adjustment in the transition period and movement up the career ladder (Levinson, Darrow, Klein, Levinson, & McKee, 1978). Mentoring can be found at the individual, or one-on-one, level, and at a group level where one faculty member serves as a mentor to a group.

Mentoring provides a framework for sharing experience and knowledge about inside policies and practices, expectations and politics within departments and institutions. Mentoring can also be seen as an indicator of collegiality in the department – a factor found to be strongly related to retention of newly recruited faculty (Ambrose, Huston, & Norman, 2005; Ericson &Rodriguez, 1999; Zhou & Volkwein, 2004). New faculty often have feelings of loneliness, isolation, and lack of social connection to and intellectual companionship with other faculty in the department or the institution (Sorcinelli, 1994; Gabelnick, MacGregor, Matthews, & Smith, 1990).

Mentoring becomes critical for women when they enter male dominated fields lacking female role models and a peer network supportive of their gender. Bagihole & White (2011) believe that female mentorship and role modelling can be successful methods of intervention for women's surviving and thriving in higher education careers. The mechanism for women mentoring other women is compared to maternal and nurturing behavior (Kram, 1985). Collaboration and establishing a supportive and satisfactory work environment is at the heart of feminist leadership philosophy (Barton, 2006). Gibson (2004) identified five essential themes of the female faculty mentoring experience: (a) having someone who truly cares and who acts in one's best interest; (b) a feeling of connection; (c) being affirmed of one's worth; (d) not being alone; and (e) politics.

Searby & Collins (2010) in the case study "Mentor and Mother Hen" describe their experiences of a mentoring relationships as invaluable and fulfilling in building important collegial relationships, overcoming fears, and growing competent and

confident in the new environment. However, they note that, unfortunately, few new faculty members are lucky to have such positive experiences or have a mentor, even to begin with.

Using data collected from institutional documents, questionnaire data, and interviews with women academics in South Africa, Obers (2014) found that mentoring can be a successful strategy to enhance self-esteem and research productivity. According to theory of socially mediated learning, a supportive community develops self-confidence (Lave & Wenger, 1991). In Obers' (2014) study, 84% of respondents reported that mentoring had an impact on them as researchers by fostering development of areas important for a woman's research career, including self-esteem, professional networking, access to information, and professional capabilities.

A few studies illuminate a strategy common for female academics of color (Penney et al., 2015; Hinton, 2010; Baxley, 2011; Marbley et al., 2011): they are recognized to benefit from collectivist mentoring in the form of a peer approach, as opposed to traditional mentoring of a young protégé by a seasoned academic. Marbley et al. (2011) argue that the identity of women of color is "constituted on values of collectivity, reciprocity, relationality, and connectivity". Collectivist mentoring entails building a community within the dominant power structure (Hinton, 2010). The collective voice helps to gain power for the marginalized group (Baxley, 2011). Penney et al. (2015) suggest that facilitation of support groups on campus would create communities to navigate the tenure process, work-life balance, and other concerns.

However, even though mentoring has been viewed as an effective tool for faculty adjustment, retention, and promotion in academia, very few are fortunate enough to find a mentor. As cited in a study on mentoring, out of 86% of new faculty who wanted to have a mentor, only one third was appointed one (Searby & Collins, 2010). A possible reason is that mentoring is rarely provided as a formal and systemic mechanism (Boice, 1992). As a result, few newcomers find mentors on their own, or may even avert from these opportunities in fear of being viewed as incompetent or ignorant (Bode,1999). When more experienced faculty are not motivated to step in and guide a new member, the newcomer has to navigate the uneasy academic terrain on her own.

Faculty writing groups are identified as another important form of supporting women faculty via community building, and group mentoring. Writing groups provide support mechanisms for new academics via a sense of solidarity (Galligan et al., 2003; Grant, 2006; Lee & Boud, 2003; Morss & Murray, 2001). During the writing group meetings, there are ongoing discussions about various aspects of academic life such as negotiation of the tenure process, and the balance of family and career goals. Penney et al. (2015) shared their experiences of participation in a female writing group where they would reflect on the blurred line in time between their work schedule and caring for their families at home. The researchers-participants of this study discussed their greater parenting responsibilities compared to those of their husbands "who, while being extremely supportive and caring about my career change, is also an academic who is very good at shutting his home office door until 10 or 11 p.m. to get his project, research, paper, or teaching preparation complete" (p.

464). They expressed their feeling of guilt when they were not able to put their family time before their work. Therefore, in addition to being an effective intervention for increasing publishing rates of female junior faculty (Sonnad, Goldsack, & McGowan, 2011), writing groups help female faculty develop confidence, learn strategies, and build identity (Gillespie et al., 2005; Pasternak, Longwell-Grice, Shea, & Hanson, 2009) needed in their early career tenure process and later promotion.

Besides the individual and group initiatives, there is a range of institutional and national programs designed to enhance women's careers and experiences in academia. An interesting case is presented by Australian universities where the representation of women, including senior positions, increased dramatically in the last 25 years. In the mid-1980s women comprised 20% of academic staff and only 6% in senior positions, and by 2014 the numbers grew by 44% and 31%, respectively. Winchester & Browning (2015) found that the change was influenced not only by societal changes, but also by government legislation, cross institutional action plans, university strategies and committed individuals – mechanisms that affected national, institutional, and individual levels. In 1986 the Australian government passed the Affirmative Action Act (Equal Employment Opportunity for Women) which was later followed by subsequent acts and addenda. Organizations were invited to apply for an award of Employer of Choice for Women. By 2012, 125 organizations, including 19 of Australia's 39 universities received the award based on gender pay equity, percent of women in executive management, and various institutional initiatives such as maternity leave provision and flexible work practices (Winchester & Browning, 2015).

In 1994, senior women in Australian universities established the Australian Colloquium of Senior Women Executives in Higher Education, known today as Universities Australia Executive Women (UAEW). Their action plan led to raising awareness, sharing of strategies for addressing gender equity, and data collection and analysis illustrating the gender gap. A cross institutional initiative and a number of developmental programs were implemented by universities that targeted specific cohorts of women. Other strategies such as mentoring, leadership training, and media profiling of women were employed as well.

While some universities recognize the need to pay attention to gender composition of their faculty and have established committees or departments to collect data and report findings, in many cases no process exists regulating the use of the findings to promote change (Wilson et al., 2008). A greater dialogue in university leadership regarding gender issues is required to facilitate systemic change.

In the United States and Europe, at the national level there are a number of programs facilitated by governments or national foundations in close cooperation with universities. One example is the ADVANCE program that began as campus-wide projects across the United States funded by the National Science Foundation (NSF). Since 2001, the NSF has invested over $135M to support projects at more than 100 institutions of higher education and charitable organizations in 41 states, the District of Columbia, and Puerto Rico. The goal of the ADVANCE program is to promote institutional transformation with respect to the retention and advancement of women faculty.

As an example of such a program, the University of Maryland ADVANCE program aims to lead the Association of American Universities (AAU)/Big 10 research universities in women's representation, retention, satisfaction, professional growth, and positive work environment. The program is committed to developing strategic networks for faculty across disciplines, enhancing women's agency through knowledge and planning for career advancement, and recognizing faculty contributions and accomplishments (https://www.advance.umd.edu/).

By collecting and analyzing data the UMD program engaged in research production on burning issues of gender inequality in higher education, increased awareness of equity issues within the institution and outside, reduced bias and its negative effects, and advocated for transparency of university and department policies and procedures affecting women's careers. Since the beginning of the program in 2010 the representation of women faculty at the University of Maryland increased; the proportion of assistant professor women who resigned pre-tenure decreased; paid parental leave was started; appointments, promotion and tenure policies began to reflect work-life issues; participants of ADVANCE programs and activities have been found to be more likely to be retained and advance, and to show improved career agency, on-campus networks, and sense of community (UM ADVANCE Project Evaluation Report, 2016).

Similarly, the Council of Canadian Academies raised concern about the status of women in academia, STEM, and research, and developed plans for action for Canadian universities (The Expert Panel on Women in University Research, 2012). Likewise, the Royal Society of Edinburgh proposed initiatives and policies for

Scotland and produced a set of recommendations to the Scottish and the UK governments, business and industry, funders, universities, research institutes and women's organizations (The Royal Society of Edinburgh, 2012). The UK Resource Centre for Women in Science, Engineering and Technology and its Scottish equivalent, the SRC, have combined training and support for women with guidance and best practice solutions for employers. However, as opposed to the ADVANCE type programs, most of these initiatives in the UK and Scotland have been ad hoc and short-term. More consistent long-term strategic and systemic policies and practices are required to see a pivotal change.

Frameworks for Understanding Gender

There are a variety of approaches such as poststructuralism, interpersonal relations, social networking, etc. that are utilized to analyze women's experiences. These approaches allow giving voice to lived experiences of the marginalized (Savigny, 2014). Read & Kehm (2016) adopted a feminist poststructuralist approach when looking at the differences between UK and German institutions in terms of female leaders. According to their approach, characteristics of ideal leaders are not fixed to a specific gendered performance, i.e., women are not assumed to prefer soft transformative styles, empathy and conversational skills, and vs. men being confident, risky and assertive. Therefore, they argue that in addition to increasing the numerical proportion of women leaders in academia, the academic cultural practices and dominant gendered conceptualizations of the "leader" should be challenged.

Jones and Palmer (2011) focus on interpersonal relationships among female colleagues from a psychodynamic perspective based on psychoanalytical theory. The

theory explains behavior motivations by conscious and unconscious influences (White, 2004). Women's life and prior workplace experiences guide their behaviors in the present workplace. Likewise, using grounded theory, Gasser & Shaffer (2014) examined how women's life experiences influence their academic career "pipeline" experiences. Obers (2014) uses social network theory suggesting that women are provided with less access to critical networks. Thus, this limited access inhibits their social capital and career success.

However, these approaches are not sufficient to formulate and examine gender problematic comprehensively and consistently. The use of feminist theories lenses presents a more thorough understanding of the issues.

Since 1960s, with the second wave of feminism and growing campaigns for women's rights and opportunities across the world, gender studies field emerged giving rise to new theoretical analyses of women's status in the society. Among those, several major perspectives merit discussion: Fraser's (2007) formulation of gender injustice, Butler's (2004) institutionalization of gender, and Kanter's (1977) organizational analysis of gender.

Fraser's analysis of gender justice encompasses "the full range of feminists concerns" (Fraser, 2007, p. 23). She examines gender justice via two dimensions – maldistribution and misrecognition – within economic and political paradigm. In the view of ascending neoliberalism and economic inequalities feminist theorists are posing questions beyond egalitarian distribution to include issues of identity, representation and difference.

From the dimension of distribution, gender is entrenched in the economic structure of society. The traditional division of labor draws a clear line between paid "productive" labor of men and unpaid "reproductive" and domestic labor of women. From the recognition dimension, gender is ingrained in the status order of society. Fraser (2007) identifies androcentrism as a major cause for gender injustice: valuing masculinity and devaluing femininity across institutional policies and practices, and societal and popular culture. Subordination status results in many forms of misrecognition injustices such as sexual harassment, domestic violence, stereotyping, marginalization and denying of full rights. Recognition is fundamental to identity and status: "recognition is not just a courtesy but a vital human need" (Taylor, 1994, p. 26).

Hence, Fraser's vision of gender justice entails, on the one hand, concerns regarding poverty, exploitation, class inequalities, and, on the other hand, disrespect, cultural imperialism, and status hierarchy. Within this framework, gender injustice is embedded in socio-economic and political structure of society and its culture. An integral principle guiding this framework is the principle of participatory parity when all members of the society interact as peers.

Echoing Fraser's recognition dimension, social dominance theory focuses on group-based hierarchies (Sidanius & Pratto, 2001). People's levels of social dominance orientation (Pratto et al., 1994) reflect attitudes toward certain social policies targeting inequalities.

Ambivalent sexism theory (Click & Fiske, 1996) explains sexism as a multidimensional construct, and distinguishes between hostile sexism and benevolent

sexism. Click et al. (2000) found both hostile sexism and benevolent sexism inversely related to the level of gender equality across countries.

Butler (2004) suggests that gender, as other social and cultural norms, is regulated, institutionalized, and imposed. As a norm and a form of social power, it may operate explicitly or implicitly. She envisions power as regulating life by limitation, prohibition and control (Butler, 1990). She argues that regulations restrict the discourse on gender to the binary perspective of masculinity and femininity. By taking further the argument of gender functioning as a social norm, Butler (2004) states that our individual personhood is inherently dependent on these social norms. Consciously and subconsciously we adhere to the social expectations and construct our identity.

While Fraser and Butler problematize gender identity construction within the socio-economic and political structure of the society, Kanter (1977) explores gender disparities as voluntarily shaped at the level of group or organization rather than socially imposed.

Arnot & Dillabough (1999) examine the relationship between gender and democracy, and explore the contribution of feminist theory to the understanding of the political role of education in democratic societies. In doing so, they build upon works by Pateman (1992), Phillips (1991), Yuval-Davis (1997), Yuval-Davis & Anthias (1989), Pieterse & Parekh (1995), and Martin (1994). Pateman (1992) argues that the liberal political thought of democracy traditionally privileged the dominance of masculinity, and portrayed women as psychologically unbalanced which excluded them from the social order, civic society, and political power, or “political settlement”

(Phillips, 1991). The legitimized privileging of men labels women who resist the dominant view as "deviant" (Yuval-Davis, 1997). Women are seen as mothers and caregivers, and as outsiders to the political process (Martin, 1994). As education system mirrors and institutionalizes the political order, the gendered inequalities transverse into the principles and relations within the education system.

Liberal feminism urges to de-gender the public sphere; thus, highlighting "the importance of feminizing the male public sphere, whilst still retaining the social functioning of the female private sphere" (Arnot & Dillabough, 1999, p. 167). There are two points that are worth discussing. First, it is acknowledged that as women enter male-dominated fields, the appreciation of the job and its remuneration decreases, and vice versa (Schieder & Gould, 2016). The renowned examples are computer programming, designing, and biology. Therefore, the core problem becomes not the numbers but the value of the work performed by a woman. Second, retaining the social functioning of the female private sphere along with entering male public sphere resembles the Soviet system, where women were encouraged to participate in the workforce on par with men but their primary role in the society remained as the one of a mother, caregiver and housewife. The century long experience shows that this structure has not challenged women's oppression in many aspects of social, political, economic and family life.

The next assumption developed by liberal feminism is that of providing opportunity through education. Undoubtedly, providing girls with access to education resulted in an invaluable progress in gender parity measures, although has not solved all the problems women face in a competitive economic sphere. In fact, women

surpassed men in the levels of educational attainment: 37% of women have a college or advanced degree, as compared with 32.5% of men (CPS ORG, 2015). Despite these achievements, they still earn less than men at every education level and approximately 70 to 80% of men's pay on average. Men with a college degree make more per hour than women with an advanced degree (Economic Policy Institute, 2015).

Most studies dealing with gender inequalities in higher education are not challenging the ideological premises of the foundation which the education system is currently based upon. Instead, they mostly address the disparities in the numbers (representation) or other quantitative indicators such as time in promotion, or examine the strategies women should be adopting to adjust to the male-oriented environment. On the contrary, Arnot & Dillabough (1999) delve deeper into the roots of the systemic inequalities by exposing the deficiencies of the democratic education and liberal feminism, which were based on alleviating "presumed deficits" of girls (Arnot & Dillabough, 1999, p. 168) rather than on questioning the gendered school structure.

Chapter 3: Methodology

Conceptual Framework

Agency has been studied in many disciplines including psychology, sociology, anthropology, philosophy, and law. From a sociological perspective, agency is largely understood as a sense of power and choice making (Elder, 1997) and a capacity to act (Archer, 2003).

In gendered organizations, environments constrain women's choices and ultimately advancement (O'Meara, 2015; Gardner, 2012) through implicit bias, discrimination, access to resources, and worker norms that contradict work life balance (Acker, 2006). However, through these means, organizational cultures simultaneously have an influence on the shaping of agentic perspectives (Bourdieu, 1998). Agency theories refer to these perspectives as internal conversations, reflexivity (Archer, 2003; Caetano, 2015) and taking standpoints (Bourdieu, 1998), steps that are necessary prior to taking action. Agency theory has been applied to faculty career by O'Meara (2015) and defined as "assuming perspectives or taking stances to achieve goals" (O'Meara, 2015, p. 332). O'Meara and colleagues found that faculty agentic behavior is strongly influenced by agentic perspective (Campbell, 2012; Campbell & O'Meara, 2013). Agentic perspective helps to view a situation from multiple sides and see a range of options when making choices.

Sense of agency can be executed at individual and collective levels. Individual agency stems from individual identity that incorporates individual experiences, stories, and nuances. However, individual agentic perspectives intersect with social

identity shaping group or collective agentic perspectives based on gender, race/ethnicity, age, discipline, family status, etc. (O'Meara, 2015).

Factors Affecting Sense of Agency

Agentic perspectives and actions emerge from and are influenced by organizational structures, and the influence can take positive and negative directions. Everyday organizational practices are often found to be gendered, meaning that they (1) favor men in higher leadership roles, (2) reinforce labor division via language and images, (3) shape dominance and submission communication forms, (4) construct gendered identity, and (5) value masculine characteristic in work (Acker, 2006). Gendered organizational environments are likely to suppress development of women's sense of agency (O'Meara, 2015). While some may develop their strengths in response to these gendered practices, studies show that many women may feel discouraged and less confident and resign (Gardner, 2012).

In order to alleviate the deteriorating effect of gendered organizational structures on a faculty sense of agency, universities and departments may engage in provision of policies and programs designed to support women faculty and enhance their agency, such as peer networking, mentoring and career advancement workshops. While these efforts are still rare, some initiatives such as ADVANCE exist across universities in the United States.

Rank also plays an important role in faculty agency: sense of agency in career advancement is expected to increase as faculty advance in career and are promoted (Campbell, 2012; Campbell & O'Meara, 2014). Because pre-tenure faculty feel less secure about their jobs and worry about their productivity and relationships with

colleagues, they may experience less career agency, power, and voice. However, even associate professors and even women full professors who are supposed to be highly agentic may experience decreased agency and leave (O'Meara, 2015; Toutkoushian & Conley, 2005).

Research Methodology

This section presents an overview of methods utilized in research on women in academia, and then focuses on case study method and its elements as the most fitting tool for my dissertation.

Social science research covers a wide range of methods and tools such as surveys, interviews, case studies, experiments, observations, focus groups, document analysis, ethnography, and statistical research. The selection of methods begins with developing research questions. The types of questions – "what", "why", "when", or "how" – determine the methodology that enables the researcher fully examine the phenomenon.

The selection of methods for my dissertation was guided by the selected research topic. Specifically, in making a case of gender inequalities in Russian academia, I intended to understand the why and the how of the processes taking place in institutions, and women's *experiences* in these institutions. In particular, I wanted to explore what makes women faculty advance in their academic career or compete for leadership roles, and what impedes them in their aspirations, how they develop their agency, and what role institutions play in shaping their faculty agency. Analyzing experiences requires a qualitative approach to the study, and analyzing the context is crucial to understanding the phenomenon. "Paying attention to the contexts

in which people live and in which social phenomena occur is critical for attaining a full understanding of their meaning" (Sutton, 1998, p.21). Therefore, I am using a mixed method design. Collecting multiple types of data enhances the analysis of the research problem compared to quantitative or qualitative methods alone (Creswell, 2013).

A range of quantitative and qualitative methods and their mixture have been used extensively in research addressing gender issues in academia. Silander et al. (2012) conducted a survey with a subsequent explorative factor analysis and studied a large database of individuals over the span of 10 years to examine the relationship between disciplines and gender composition, the probability of leaving academia, and attitudes towards gender equality. Hartley and Dobele (2009) applied non-parametric testing to survey data to explore potential correlation between self-supporting attitudes or behaviors of successful women academics and effective research outcomes. Lipton (2015) explores gender bias in quality assurance process using a mixture of descriptive quantitative tools and a document analysis. Using interviews, Howe-Walsh and Turnbull (2016) analyze women's narratives to highlight the perceived barriers to academic career advancement. To examine the working relationships among female professional staff in community colleges, Jones and Palmer (2011) utilized a mixed methodology consisting of regression analysis of collected survey data and a grounded theory approach to open-ended survey questions. By presenting lived experiences of a Black female academic working at a predominantly white institution, Hinton (2009) explores Black women's power in their academic promotion. Through the use of storytelling or women's oral histories

of their academic experiences, Savigny (2014) intended to challenge the existing power structures. Similarly, using personal histories, Kjeldal, Rindfleish and Sheridan (2005) focus on disparities between the formal equity policies, such as workload allocations, and perceptions of unequal opportunities for women and men. Penney et al. (2015) employed analysis of personal, reflective, written narratives of women in a faculty writing group.

This study analysis was primarily based on quantitative methods, i.e., survey. For triangulation purposes, I conducted interviews with women faculty to develop converging lines of inquiry and strengthen construct validity (Yin, 2003). For positioning faculty responses within the context of the country, I complemented survey and interviews with documentary analysis. Furthermore, to understand the specificities of the nature of these gender inequalities and agency, one needs to delve in a solid scrutiny of the institution within which the inequalities occur. Therefore, the analysis required a case study of a concrete setting, which helped to interpret the unique features of the phenomenon.

Case Study

Case study research is based on multiple sources of evidence – qualitative and quantitative – and is a preferred strategy when "how" and "why" questions are posed (Yin, 2003). The essential part of a case study is that as an empirical inquiry it is focused on a contemporary phenomenon within a real-life context, and especially when the boundaries between the phenomenon and the context are not clearly evident (Yin, 1981). Unlike in grounded theory and ethnography, a case study is based on a preliminary constructed theory, which in this case study is the conceptual framework

of women faculty agency. Analytical generalization helps to extrapolate from a case study to a theory. The goal of a case study is not to obtain results statistically generalizable to the population across institutions in the country but to provide a comprehensive analysis of the phenomenon to contribute to the existing knowledge of the issue that can be utilized for further studies of a larger scale.

A case study is typically understood as a study focusing on a specific individual, group, or institution (Yin, 2003). While this is one of the features of a case study, there are other nuances that distinguish this method. Numerous studies focus on a sample drawn from one institution or multiple institutions. For instance, Moors, Malley, and Stewart (2014) examined the connection between perceived institutional support for family commitments, on the one hand, and job satisfaction and sense of belonging, on the other hand, and its moderation by gender. They conducted a hierarchical multiple regression analysis of responses to an online survey at one large research U.S. university. While Moors et al. (2014) study involves a phenomenon (faculty perceptions) limited by time and space (data collected at one university over three years), it presents a consistent sample generalizable to other institutions and populations, rather than a case study. To be named a case study, Moors et al. (2014) paper is lacking the direct connection to the context that justifies the uniqueness of the case and the phenomenon. The latter is evident in Obers' (2014) study. In trying to understand women's experiences throughout their academic career, Obers (2014) conducted a case study at one higher education institution that involved analysis of institutional documents, questionnaire data and in-depth interviews. Wilson et al. case study (2008) of women's status in one Canadian university involved analysis of

archival descriptive data regarding numbers of men and women hired, salary, rank, and promotion. The detailed description of the context, extensive and in-depth analysis of the phenomenon, and the illustrated close relationship between the context of the institutions and the phenomenon in Obers' (2014) and Wilson et al. (2008) studies allowed for developing a case.

A case study method is typically found to be used in research that examines a specific phenomenon evolving in unusual context. The goal becomes understanding the mechanisms and the reasons behind the visible part of the iceberg of the phenomenon rather than simple quantification and generalization of the observed instances. In a sense, case study compensates for statistical generalizability by focusing on particularly revealing cases: "One can often generalize on the basis of a single case, and the case study may be central to scientific development via generalization as supplement or alternative to other methods" (Flyvbjerg, 2011, p.305). By conducting an in-depth analysis of the case, one ensures transferability and naturalistic theoretical generalization of the case study (Tracy, 2013).

Case study research is positioned within a real-life, contemporary context or setting (Yin, 2009) and is considered as a methodology and a comprehensive research strategy (Denzin & Lincoln, 2005; Yin, 2009): "Case study research is a qualitative approach in which the investigator explored a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports), and reports a case

description and case themes" (Creswell, 2009, p.97). Although primarily explanatory by definition, case studies may also involve exploration and description.

The reason why numerous studies are not justifying the use of case study as a method could be that it is often seen not as a methodology but as an object bounded by time and place (Stake, 2005). The point of interest in a case study is not an object, individual, or a group, but rather a *phenomenon* or *process*.

As a method, case study embodies an array of characteristics. First, it implies a specific case that may be an individual, a group, an organization, a community, a project, or a process, etc., bounded by a specific time and place (Yin, 2009). Second, the case should be unique in its intent to understand the problem or issue that is researched – intrinsic or instrumental case (Stake, 1995). Third, the case entails an intense use of possible sources of data to develop in-depth understanding of the issue and the context (Creswell, 2009).

Case study method is also valuable, as it may inform theory development (Yin, 1989) in a newly developing research area (Christie et al., 2000). Case study method makes it possible to build a database to contribute to existing or developing theory (Glasser & Strauss, 1967). This is particularly relevant to my study as the gender and leadership issues discussed above are scarcely researched in the context of Russia. Researcher's interpretations and development of patterns, referred to by Stake (1995) as "propositional generalization", evolve into theory building, similar to a theory which is grounded in information from the participants (Strauss & Corbin, 1998; Lincoln & Guba, 1985). The theoretical value of case study method dismantles the common misunderstanding about case study research that one cannot generalize

from a single case which makes impossible for a single case to contribute to scientific development (Flyvbjerg, 2006).

Multiple case study, i.e., using more than one context such as a case study of two institutions, is based on a theoretical replication. Multiple case studies predict contrasting results but for predicable reasons, and offer robust analytical conclusions, which increases external validity (Yin, 2003).

Research Methods

Survey Component

The use of a survey helped to access a larger sample in order to provide an overall account of the setting in two institutions and corroborate findings from interview analysis. The survey took approximately 15 minutes to complete. Some of the items were developed from a Faculty Work Environment Survey (O'Meara, 2011) developed and conducted at the University of Maryland by the ADVANCE office. The survey was pilot tested with the help of faculty from the selected institutions. Issues covered by the survey included:

1. policies and practices that the participants experienced in their career where their gender played a role;
2. career advancement such as feelings of being in control or stuck in their career, and perception of clarity and fairness of promotion guidelines;
3. professional relationships such as receiving or providing help, feelings of collegiality and isolation, and having a voice in decision-making;

4. workload management such as their ability to shape the syllabi for their courses, their time commitment to teaching, advising, service, and research, their ability to participate in research projects, their opportunity to undertake rewarded university service; and
5. work-family balance such as satisfaction with the amount of time they spent on family responsibilities vs. work, their ability to control the distribution of this time, and the support from their department and family for their work-family balance.

Survey items also included demographics questions regarding their rank, gender, marital status, and number of children and their ages.

Interview Component

Following the surveys conducted with both female and male faculty, I conducted interviews with female faculty in both institutions. Interviews produced a deeper and richer insight into participants' perceptions of the environments shaping their sense of agency and behavior.

The ground for learning about and from women's experiences is formed by in-depth interviews. Interviewing is one of the most widely used tools in social science research: approximately 90% of social science studies rely on interviews (Briggs, 1986). Through interviews respondents can provide their opinion, motivation, and experiences, stories and narratives, rationales and justifications, and information on past events (Lindlof & Taylor, 2011). Interviews are useful for probing and testing assumptions (Tracy, 2013).

Feminist researchers are observed to utilize interviews because "interviewing offers researchers access to people's ideas, thoughts and memories in their own words…" which is essential for research on women as "an antidote to centuries of ignoring women's ideas altogether or having men speak for women (Reinharz, 1992, p.19). Furthermore, stories told by interview participants help to interpret their identities and experiences:

> We all tell stories about our lives, both to ourselves and to others; and it is through such stories that we make sense of the world, of our relationship to that world, and of the relationship between ourselves and other selves. Further, it is through such stories that we produce identities. (Lawler, 2002, p. 239).

Stories help to reconstruct experiences and reality and understand others' perspectives and interpretation of a specific situation. In interviews we come to know others and ourselves (Fontana & Frey, 2005). A common question in feminist studies is how responses in the interview are influenced by the participants' gender. Therefore, the method characterizes feminist research as much as its research questions and theoretical framework (Wheatley, 1994). Feminist researchers are more likely to avoid obvious control and structured question-answer sessions in interviews, and instead develop them as free-flowing conversations (Tracy, 2013). In this sense, the following definition describes better an interview in feminist approach: interviews are "an inter-change of views between two persons conversing about a theme of mutual interest" (Kvale & Brinkmann, 2009, p. 2). However, as opposed to a regular conversation, they are characterized by having a specific purpose and structure. Interviews require a substantial amount of time and resources, planning, scheduling, conducting, and transcribing.

Interviews can take form of one-on-one or group interviews (focus groups). One-on-one interviews may give the participants a sense of more confidentiality than in a group, and they may disclose experiences they would otherwise be not comfortable sharing. On the other hand, a focus group may provide participants a feeling of support and mutual understanding and motivate them to speak up. Meanwhile, in a focus group participants may adhere to one commonly accepted perspective if they perceive it as more favorable, or one participant may take a lead in the conversation while others may not feel the need to contribute or may feel shy.

The interviewer may be a complete participant or an overt observer from outside. In case of covert participation, the observer does not reveal his or her status as a researcher. Complete, or covert, participation makes structured formal or audio-recorded interviews virtually impossible. Covert interviewing also created limits on the questions that could be asked. Another drawback of being a completely covert participant is that the more the researcher as an insider becomes familiar with the setting, the less visible the values and behaviors are. “The more you know about a situation as an ordinary participant, the more difficult it is to study it as an ethnographer”, and “the less familiar you are with a social situation, the more you are able to see the tacit cultural rules at work” (Spradley, 1980, p. 62). In contrast, an overt observer discloses his or her identity as a researcher to the group being observed. This form of observation is considered to be more ethical because the participants are aware of the fact of being studied and have a right to agree to participate or withdraw from the study. Disclosing researcher identity enables the observer to take notes and make audio-recordings. The status of an overt researcher

enables to openly ask questions even those that are naïve, stupid, blunt, or taboo (Bailey, 1996). However, an overt participation creates a risk of a Hawthorne effect when participants may alter their behavior or responses as a result of awareness of being observed. Therefore, the overt researcher has to take into account the possibility of bias due to the Hawthorne effect when asking questions and analyzing the data.

I chose to employ interviews because they helped to understand what the participants perceived of organizational practices and structures (Schein, 1985; Yin, 2003). To be able to engage in a flowing discussion and obtain rich data about participants' experiences, I designed semi-structured interviews. Interviews included questions about what perspectives the participants adopted to achieve their goals, how they viewed the obstacles and approached them, what personal qualities they thought they had that helped them in their career, their opportunities to organize professional networks and work across departments, colleges, and universities, and how their gender played a role in those networks, what policies and practices, resources, mentoring, work-life balance support, and interactions with other faculty in the department or university influenced their perspectives and reaction to situations.

Participants

Two public universities were selected for the study, Regional University (RU) and Technical University (TU). The use of "regional" here should not be confused with the terminology of the *U.S. News & World Report (USNWR)* rankings and utilized widely by other researchers and organizations. *USNWR* identifies four categories of higher education institutions: National Universities, National Liberal Arts Colleges, Regional Universities, and Regional Colleges (USNWR, n.d.). This

categorization, derived from the Carnegie Classification of Institutions of Higher Education, is based on the institutional status and mission, with National Universities representing institutions of a very high status that offer a full range of degree programs and emphasize research, and Regional Universities representing institutions that focus on undergraduate degrees and offer a limited number of master's degree programs but few, if any, doctoral programs (Carnegie Foundation for the Advancement of Teaching, n.d.). In this study, I use the term 'regional' to signify a *geographical* definition rather than status. The two selected institutions are federal public universities, and comparable in their role to U.S. flagship public institutions. Regional universities in Russia are of utmost importance for regional and national socio-economic development; they provide comprehensive quality education embodying the optimal combination of humanities, social and technical sciences, and research; and they offer all degree levels.

The two universities were selected based on their proximity, their history, status and size to control for these characteristics. Both universities are the largest and the oldest higher education institutions in the region, located in the Northwestern part of the country, federally supported, and awarding doctoral degrees. The Regional University was established in 1931, and the Technical University in 1952. Each university is constituted of approximately 15 colleges, 1,000 of faculty, and 15,000 to 20,000 students currently enrolled in more than 80 programs. The universities have branches in other cities and offer distance education programs.

While the findings of the study should not be generalized to the rest of institutions in the country, it is likely that the dynamics that are driving changes in

these universities' mission, priorities, goals, and environment, are not unique to the two institutions but are widespread across the country. The two universities have characteristics that are common to most public institutions in the country: both were regulated and financially supported by the federal government for many decades prior to the demise of the USSR as well as following restructuring and reforms of the 1990s and early 2000s.

Although similar in some ways, the selection of the two universities is justified by differences in their missions – one being technical in nature (TU) and the other one being initially established to focus on teaching, humanities and social sciences, and transformed into a university currently covering a full range of disciplines (RU). While some disciplines are presented in both, each of the universities offers a range and a depth of disciplines unique to the institution. This distinction was intended to help to reveal potential differences in the level of agency women faculty have in these two institutions.

Participants in this study were faculty at these two universities in Russia. The study included a range of departments to cover various disciplines. Participants were selected across fields, including Institutes of Mathematics, Physics, Natural Sciences, Computer Science, Institute of Languages and Literature, Communication, Sociology, Economics, Psychology, and Institutes of Engineering. All participants were thoroughly informed about the purpose of the research. No deception was used.

Participants were recruited on a voluntary basis. First, I visited departments and distributed paper surveys to the faculty in their departments inviting them to complete the survey. Surveys were anonymous. No identifiable information (names,

email addresses) was collected. The surveys took approximately ten minutes to complete.

Second, I conducted face-to-face and phone interviews with faculty. All interviews were conducted in Russian. On average, the interviews took approximately 40 minutes to 1.5 hours. Interviews were audio recorded upon agreement of the participants and hand notes were taken when the interviews were not audio recorded.

A total of twenty women faculty were interviewed from both institutions. I contacted female faculty in person to invite them for face-to-face and phone interviews. A snowball sampling was used to increase participation rate and access to participants, i.e. interviewees were asked to recommend their colleagues for interviews. Interview participants were selected from a range of ranks such as instructor, assistant professor, associate professor, and full professor positions. The range of ranks and disciplines allowed me to observe differences potentially emerging in responses of faculty at various stages in their academic career.

The survey was distributed to 400 faculty members in the selected universities. Of the 400 faculty, there were 162 respondents that resulted in 40.5% response rate. Women and faculty from humanities and social sciences were overrepresented, and full professors were underrepresented (Table 1).

Table 1. *Respondent Demographics*

Gender	Women	69.2%
	Men	30.8%
Rank	Instructor	3.9%
	Assistant Professors	25.8%
	Associate Professors	65.8%
	Full Professors	4.5%
Discipline	STEM	35.3%
	Humanities/Social Sciences	64.7%

Institution	Regional	58.2%
	Technical	41.8%

Women faculty were less likely than men faculty (60.2% and 78.3%, respectively) to be married, and more likely than men faculty to be divorced (10.7% and 0%, respectively) ($X^2(3) = 9.204$, $p < .027$). While this gender difference does not necessarily belong to academia, because of high divorce rates in the country and a growing trend of younger generation starting families later in their lives, it underlines characteristics of the faculty currently employed – most faculty having a family and, as shown in the next figure, divorced and single women having more children than unmarried men (Figure 1).

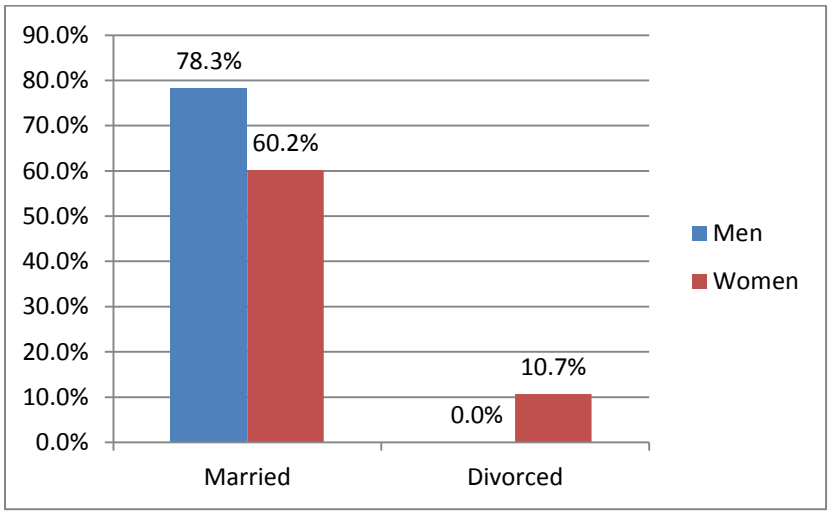


Figure 1. Survey respondents' marital status, by gender

Although not statistically significant, the data showed that women also tend to have more children overall (47.2% for women vs. 41.3% for men); and when looking at unmarried faculty only, the difference was even more obvious (28.6% for women vs. 10% for men). These numbers align with the fact of increase in single and divorced mothers in the country, the phenomenon that began in the 1990s and is still visible (Figure 2).

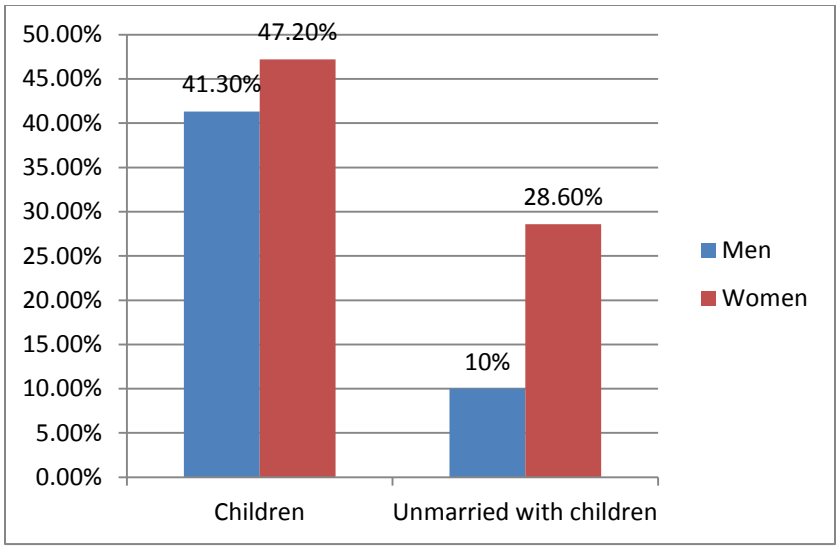


Figure 2. Percent of all survey respondents with children vs. percent of unmarried survey respondents with children, by gender

Table 2. *Gender representation of faculty, by college*

Colleges	Women faculty	Percentage of women faculty	Men faculty	Total
Regional University				
College of Public Safety	14	42.4	19	33
College of Natural Sciences	20	66.7	10	30
College of Arts and Design	32	57.1	24	56
College of History and Sociology	30	55.6	24	54
College of Mathematics, Information Technologies, and Physics	39	39.4	60	99
College of Oil and Gas Industry	11	26.2	31	42
College of Pedagogy, Psychology, and Social Technologies	40	64.5	22	62
College of Social Communications	30	73.2	11	41
College of Udmurt Philology and Journalism	19	76.0	6	25
College of Physical Training and Sports	5	29.4	12	17
College of Economics and Management	48	70.6	20	68

College of Languages and Literature	96	96.0	4	100
College of Law, Social Management and Security	50	54.9	41	91
Technical University				
College of Automotive Engineering and Metallurgy	12	18.7	52	64
College of Power and Urban Engineering	11	39.3	17	28
College of International Educational Programs	38	74.5	13	51
College of Mathematics and Natural Sciences	79	56.0	62	141
College of Construction and Architecture	44	56.4	34	78
College of Economics, Management and Law	70	76.1	22	92
College of Computer Engineering	17	26.6	47	64
College of Instrumentation Engineering	18	26.9	49	67
College of Mechanical Engineering	20	22.2	70	90

Data Collection

In addition to conducting surveys and interviews, national policy documents and institutional plans from the two universities for the past 20 years were scrutinized to identify whether and how gender issues are formally addressed at the national level and locally. Late 1990s began the period of substantial transformations in higher education system in the country influenced by internationalization and transition to the market economy. Federal government enacted laws regulating the national education system to address the new paradigm in response to the era of globalization, internationalization, competition, optimization of resources, and information

technologies. Therefore, this timeframe was important to explore whether gender issues are recognized, to track possible changes in awareness of these issues, and investigate policies developed to approach them and institutional initiatives undertaken to facilitate equitable assignments of workload.

Data Analysis

Survey data were invaluable in providing a broader view of the gendered contexts of the two institutions and helped to compare satisfaction with resources, work-family balance, and work environments by gender. Analysis of the survey included descriptive statistics, ANOVA tests, regression techniques, factor analyses and structural equation modeling.

The analysis of interview data was iterative (Creswell, 2007). I first examined the interview transcripts and noted instances of agency perspectives and behavior. Then I coded these instances using pre-defined and emerging themes, i.e., following concept and data driven analysis (Kvale & Brinkman, 2009), with a subsequent analysis of connections between the themes, perspectives and behavior. Throughout the data I searched for examples of gendered organizational contexts or practices, using Acker's (2006) five ways of gendering organizations, to link the contexts with faculty reactions to them.

Extending Gasser & Shaffer (2014) model of women's experiences in academia, I developed pre-defined categories of themes: career development and organizational influences. Career development category includes a cognitive theme (career aspirations, interests, choice and expectations), a coping theme (decision making, motivation, adaptability, persistence, self-efficacy, self-esteem, personal

values, personal power, self-promoting behavior), relationships (marital and parental status, perceived support and encouragement from family members, and friends, existing role models, age), career outcomes, and satisfaction with the outcomes and environment. Organizational influences include available resources and opportunities, rewards, workload distribution, pressures, professional status, recognition, academic environment (department climate, isolation, role models and mentoring, networks, having a voice in decision making), institutional response to identified needs and challenges. With regard to the coping theme, I scrutinized the transcripts for agentic perspectives previously identified via interviews and focus groups with women faculty: "keep going" and "work hard", "doing work that is meaningful to me", "I can overcome … and succeed", "I see choices and I can create choices" (O'Meara, 2015).

Besides using pre-defined themes from the literature, I expected the data to illuminate specific features of the contexts of these two universities and reactions of women to these contexts in ways that possibly distinguished them from universities in other countries. Interview data were the primary source for cognitive and coping themes analysis – to examine deeply and closely the development, level, and enactment of the sense of agency through the lived experiences of women.

Researcher Positionality

My interest in the study originally derived from my personal long-term experience of studying and working in the Russian education system. I used to work as a lecturer in one of the institutions and, therefore, was familiar with the university system and ways to navigate the process of collecting data. My former colleagues were incredibly helpful in connecting me to faculty across departments. As a result, I

was able to examine the environment as an insider and was perceived by interviewees as one of them, as a native to the system and not as an outsider. Being female helped me get connected to female faculty and have a more open conversation about issues that they might not be willing to discuss with men. At the same time, due to my prior personal experience I was knowledgeable about the climate in humanities/social sciences but was not aware of patterns existing in STEM sciences in Russian academia. I approached the latter through the lens of my knowledge that I developed in my doctoral program, the knowledge about gender issues in STEM in the United States and worldwide, trying to evaluate which aspects apply and to expand on what specificities characterize the Russian context.

Chapter 4: Testing Conceptual Model

Procedures for Data Coding

First, I ran initial descriptive analyses to explore the data in terms of variability, normality, kurtosis and missing data. I reverse-coded nine survey items with opposite directionality of response scales. For example, in the collegiality construct the item "I feel isolated in my department" was reverse scored to have all items in that scale measured in one, positive direction. Other reverse-coded items included: "I feel stuck in my ability to advance in my career", "I have concerns about opportunities for my academic progress", "I wish I had more time to spend on research", "I have experienced a situation in my work where my gender played a role", "I had situations in my work where I experienced gender prejudices", "My family commitments had an impact on my career considerations", "My family commitments impede my career advancement", "In my family, I am responsible for family chores to a greater extent than my partner".

Steps to Form Scales and Establish Validity

Next, for the purposes of data reduction into meaningful composites I conducted principal component analysis (PCA) using oblique (non-orthogonal) factor rotation method (direct oblimin with Kaiser normalization). PCA is a dimension reduction tool that reduces a large number of correlated predictor variables to a less correlated smaller set, thus addressing an issue of multicollinearity between predictor variables (Lafi & Kaneene, 1992). Oblique methods allow for potential factor correlation, which has to be taken into account because in social sciences behavioral

outcomes do not function independently (Osborne, 2015). Since the data had large number of variables, Kaiser-Guttman rule of eigenvalues greater than one suggested extracting redundant number of components (N=11) (Table 3). In contrast, Cattell's scree plot provided a clear graphical picture with large drops in eigenvalues (Figure 3). To sort the items into meaningful composites, I examined closely each item loading in PCA pattern matrix (Table 4).

Table 3. *Extracted number of components based on PCA eigenvalues*

	Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %
1	9.307	25.153	25.153
2	2.474	6.688	31.841
3	1.950	5.271	37.112
4	1.760	4.758	41.870
5	1.612	4.356	46.226
6	1.443	3.900	50.126
7	1.279	3.457	53.583
8	1.248	3.373	56.957
9	1.149	3.106	60.062
10	1.132	3.060	63.122
11	1.047	2.829	65.952

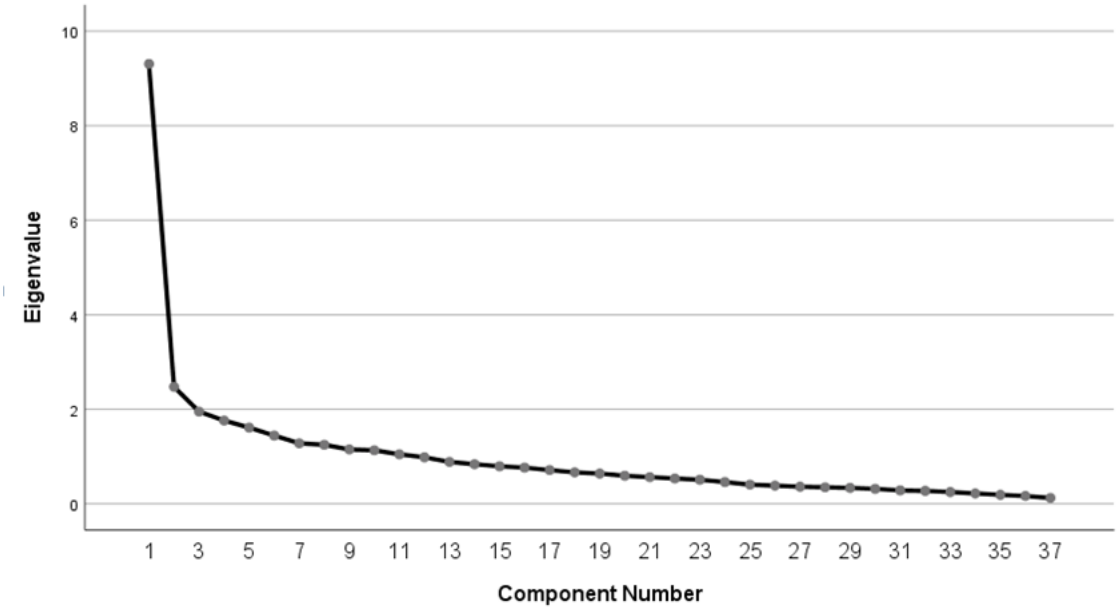


Figure 3. Scree plot

Table 4. *PCA pattern matrix*

	Component										
	1	2	3	4	5	6	7	8	9	10	11
I have control over advancement in my career.								.472			
I have been strategic in achieving my career goals.		.452								-.457	
I feel stuck in my ability to advance in my career_REVERSE		.474									
During the past five years, I have been encouraged or received help from my colleagues or other faculty in my university to support my career advancement or pursue a leadership position.								.576			
I received helpful feedback from my department chair in support of my career advancement.								.684			
In my department, the promotion requirements are clear.							.489				
In my department, the promotion process is fair.							.628				
I am satisfied with my career.											
I have concerns about opportunities for my academic progress_REVERSE					.604						
I received help from my colleagues or other faculty on campus to support my academic work.	.465										
I provided help to another faculty member in my department or institution.					.641						
I am satisfied with the collegiality in my department.	.597										
I feel isolated in my department_REVERSE	.768										
I have a voice in decision-making in my department.	.717										
My work is recognized and valued by my colleagues.	.817										
I have the freedom to choose what courses I teach.	.448								.428		
I have the freedom to design the syllabi for the courses I teach.				.642							
The process of teaching hours assignment in my department is fair.	.407										
I am satisfied with the amount of time I spend on teaching.			.414								
I have the freedom to choose what research areas I focus on.		.535		.416							

Research is a substantial part of my work.	.820					
I am satisfied with my research productivity.	.779					
I wish I had more time to spend on research_REVERSE					.749	
I am satisfied with my salary.			.537			
In my department and university professional achievements are encouraged (projects, grants, participation in workshops, seminars, etc.)			.829			
In my department and university we have programs/resources to support and attract young faculty.			.722			
I do work that is meaningful to me.		.687				
I have freedom to make choices in my everyday work life.		.719				
When I experience difficulties or obstacles in my career, I keep going and I believe I can succeed.		.653				
I am in control of the time I spend on work vs. my family chores.	.580					
My family commitments had an impact on my career considerations_REVERSE						.789
My family commitments impede my career advancement_REVERSE			.652			
My department supports faculty scheduling work commitments around family schedules.				.473		
In my family, I am responsible for family chores to a greater extent than my partner_REVERSE					.804	
I am satisfied with the amount of time I spend on family commitments.	.720					

Note: Coefficients under .4 are suppressed.

Based on the scree plot and item loadings in pattern matrix I extracted eight factors which I further tested using reliability analysis (Cronbach's Alpha). Cronbach's Alpha is most commonly used to assess the internal consistency of a survey constructed of Likert-type scales. To interpret Cronbach's Alpha output, I followed the rule of George and Mallery (2003): > .9 (Excellent), > .8 (Good), > .7 (Acceptable), > .6 (Questionable), > .5(Poor), and < .5 (Unacceptable). Cronbach's Alpha showed that the selected items reach acceptable reliability (Table 3). Most items appeared to be worthy of retention, resulting in a decrease in the alpha if deleted (Table 5).

Table 5. *Cronbach's Alpha reliability statistics*

Factor	**Cronbach's Alpha**
Promotion Procedures	.749
Professional Relations/ Collegiality	.804
Workload Distribution	.757
Resources and Support	.696
Agency Perspectives	.461
Agency Behavior	.560
Research Productivity	.782
Work-Family Balance	.541

Surprisingly, correlation matrix revealed positive and small correlation between work-family balance and research productivity (.167) (Table 6). This may indicate that other factors of faculty work have a greater effect on their research productivity than work-family balance. Other factors may include interest to engage in research and commitment to producing research outcomes. As discussed later in

the qualitative chapter, at a certain point in their career, faculty lost interest and motivation to spend substantial amount of time on research.

Table 6. *Constructs' correlation matrix*

	Organizational Factors	Work-Family Balance	Agency Perspectives	Agency Behavior	Research Productivity	Career Satisfaction
Organizational Factors		.289	.639	.534	.302	.575
Work-Family Balance	.289		.318	.303	.167	.348
Agency Perspectives	.639	.318		.451	.457	.474
Agency Behavior	.534	.303	.451		.432	.532
Research Productivity	.302	.167	.457	.432		.329
Career Satisfaction	.575	.348	.474	.532	.329	

Note: Pearson correlation

Then, I tested further the construct validity of each latent factor using confirmatory factor analysis (CFA) (Hancock & Mueller, 2013). In this step, I determined standardized item loadings on each latent factor and retained items with standardized loadings of 0.5 and higher. As opposed to exploratory factor analyses where models are entirely data driven, CFA allows the researcher to explore and confirm the originally envisioned theoretical structure (Comrey & Lee, 1992; Hair, Tatham, Anderson & Black, 1998; Pett, Lackey, & Sullivan, 2003; Stevens, 1992).

Based on Cronbach's Alpha, PCA and CFA results, I created composite scales of the seven extracted latent factors: promotion procedures, professional relations/collegiality, workload distribution policies and practices, resources and support, agency perspectives, agency behavior, research productivity, and work-

family balance. Due to high intercorrelations between constructs of promotion procedures, professional relations/collegiality, workload distribution, and resources and support, I built another second-level latent construct – organizational factors construct– that incorporated the four initial latent constructs (Table 7).

Descriptive Findings

Each item was measured using a 5-point Likert-type response scale from 1 – "strongly disagree" to 5 – "strongly agree", and the means of the items were used as the overall measures of the constructs (Table 4). One-way ANOVA analyses were conducted to determine significant differences in these constructs and individual survey items based on gender, rank, field of study, and university.

First, I provide descriptive statistics organized by constructs (Table 7).

Promotion procedures

About two thirds of the respondents felt encouraged or received help from their colleagues or other faculty in their university to support their career advancement or pursue a leadership position during the past five years (65.4%), and received helpful feedback from their department chair in support of their career advancement (62.3%). Less than a half agreed about the promotion requirements in their department being clear (49.3%) and fair (45.9%).

Collegiality

Overall, faculty reported being satisfied with collegiality in their department (81.5%). The majority of the respondents provided help to another faculty member in their department or institution (93.8%), and received help from their colleagues or other faculty on campus to support their academic work (87.7%). Most of the

respondents also perceived having a voice in decision-making in their department (81.4%), and their work being recognized and valued by their colleagues (79.5%).

Workload distribution policies and practices

The majority of faculty agreed about having the freedom to choose what research areas to focus on (79.2%) and having the freedom to design the syllabi for the courses they teach (76.1%). Most of the respondents also indicated that the process of teaching hours assignment in their department was fair (71.7%), and that they had the freedom to make choices in their everyday work life (68.5%). About two thirds of the respondents were satisfied with the amount of time they spent on teaching (62.9%), and perceived that their department supported faculty scheduling work commitments around family schedules (62.8%). Over half of the respondents reported having the freedom to choose what courses to teach (59.7%).

Resources and support

About two thirds of the respondents perceived that professional achievements such as projects, grants, participation in workshops, seminars, etc. were encouraged in their department and university (64.8%). However, only a third of the respondents were satisfied with their salary (32.7%), and less than a third indicated having in their department and university programs and resources to support and attract young faculty (24.7%).

Work-family balance

Just slightly over a third of the respondents were satisfied with the amount of time they spend on family commitments (39.1%). About the same number of faculty reported being responsible in their family for family chores to a greater extent than

their partners (39.7%). Very few of the respondents reported their family commitments impeding their career advancement (21.2%).

Agency perspectives

Most faculty perceived having control over advancement in their career (74.7%). Over a half of the respondents were in control of the time they spent on work vs. their family chores (57.7%). Over a third reported having concerns about opportunities for their academic progress (36.5%). Less than a third felt stuck in their ability to advance in their career (29.6%).

Agency behavior

Most faculty agreed about doing work that was meaningful to them (84.6%). They also said that, when they experienced difficulties or obstacles in their career, they kept going and believed they could succeed (83.2%). About two thirds of the respondents felt strategic in achieving their career goals (66.0%).

Research productivity and career satisfaction

Over a third agreed about research being a substantial part of their work (37.1%). About a third of the respondents were satisfied with their research productivity (34.0%). Most of the respondents were satisfied with their career (72.3%).

Academic rank and administrative leadership promotion

Over a third of the respondents indicated having been promoted in academic rank during the past five years or being positive that they would get promoted in the next five years (35.2%). Less than a third reported having an administrative leadership position in the past five years or having received an offer to take such a

position (30.9%). Two thirds agreed about having leadership qualities (66.4%), but only about a third of the respondents were willing to pursue a leadership position (34.9%).

Table 7. *Descriptive statistics and standardized item loadings for the final CFA model*

Constructs	Survey Item	Mean	Std. Dev.	Std. item loading	Agree/ Strongly Agree
	Organizational Factors				
Promotion Procedures	During the past five years, I have been encouraged or received help from my colleagues or other faculty in my university to support my career advancement or pursue a leadership position.	3.55	1.33	0.755	65.4%
	I received helpful feedback from my department chair in support of my career advancement.	3.53	1.40	0.696	62.3%
	In my department, the promotion requirements are clear.	3.23	1.41	0.826	49.1%
	In my department, the promotion process is fair.	3.35	1.23	0.819	45.9%
Professional Relations/ Collegiality	I received help from my colleagues or other faculty on campus to support my academic work.	4.27	.88	0.765	87.7%
	I provided help to another faculty member in my department or institution.	4.44	.63	0.543	93.8%
	I am satisfied with the collegiality in my department.	4.12	1.00	0.803	81.5%
	I feel isolated in my department	1.57	1.01	0.801	9.9%
	I have a voice in decision-making in my department.	4.18	1.04	0.745	81.4%
	My work is recognized and valued by my colleagues.	4.10	.88	0.751	79.5%
Workload Distribution	I have the freedom to choose what courses I teach.	3.40	1.31	0.751	59.7%
	I have the freedom to design the syllabi for the courses I teach.	3.86	1.30	0.714	76.1%

	The process of teaching hours assignment in my department is fair.	3.97	1.18	0.797	71.7%
	I am satisfied with the amount of time I spend on teaching.	3.57	1.36	0.599	62.9%
	I have the freedom to choose what research areas I focus on.	4.07	1.22	0.579	79.2%
	I have freedom to make choices in my everyday work life.	3.76	1.07	0.625	68.5%
	My department supports faculty scheduling work commitments around family schedules.	3.69	1.16	0.504	62.8%
Resources and Support	I am satisfied with my salary.	2.59	1.30	0.662	32.7%
	In my department and university professional achievements are encouraged (projects, grants, participation in workshops, seminars, etc.)	3.65	1.05	0.720	64.8%
	In my department and university we have programs/resources to support and attract young faculty.	2.71	1.22	0.771	24.7%
	Work-Family Balance				
Work-Family Balance	My family commitments impede my career advancement.	2.24	1.29	0.514	21.2%
	I am satisfied with the amount of time I spend on family commitments.	2.99	1.23	0.481	39.1%
	Agency Perspectives				
Agency Perspectives	I have control over advancement in my career.	3.74	1.11	0.532	74.7%
	I feel stuck in my ability to advance in my career.	2.36	1.43	0.621	29.6%
	I have concerns about opportunities for my academic progress.	2.81	1.40	0.569	36.5%

	I am in control of the time I spend on work vs. my family chores.	3.29	1.33	0.560	57.7%
	Agency Behavior				
Agency Behavior	I have been strategic in achieving my career goals.	3.72	1.04	0.503	66.0%
	I do work that is meaningful to me.	4.19	.92	0.635	84.6%
	When I experience difficulties or obstacles in my career, I keep going and I believe I can succeed.	4.19	.89	0.630	83.2%
	Research Productivity				
Research Productivity	Research is a substantial part of my work.	2.81	1.37	0.766	37.1%
	I am satisfied with my research productivity.	2.73	1.36	0.958	34.0%
	Career Satisfaction				
Career Satisfaction	I am satisfied with my career.	3.88	1.06	--	72.3%
	Academic Rank Promotion				
Academic Rank Promotion	I got promoted in academic rank during the past five years/ I am positive that I will get promoted in the next five years: YES	--	--	--	35.2%
	Administrative Leadership Promotion				
Administrative Leadership Promotion	I had in the past five years/have/received an offer to take an administrative leadership position: YES	--	--	--	30.9%

ANOVA Results

Gender Differences

Interestingly, women faculty (M = 3.73, SD = 1.34) were more likely than men faculty (M = 3.10, SD = 1.45) to report having received helpful feedback from their department chair in support of their career advancement ($F(1,157) = 7.022$, p = .009) (Table 8, Figure 4).

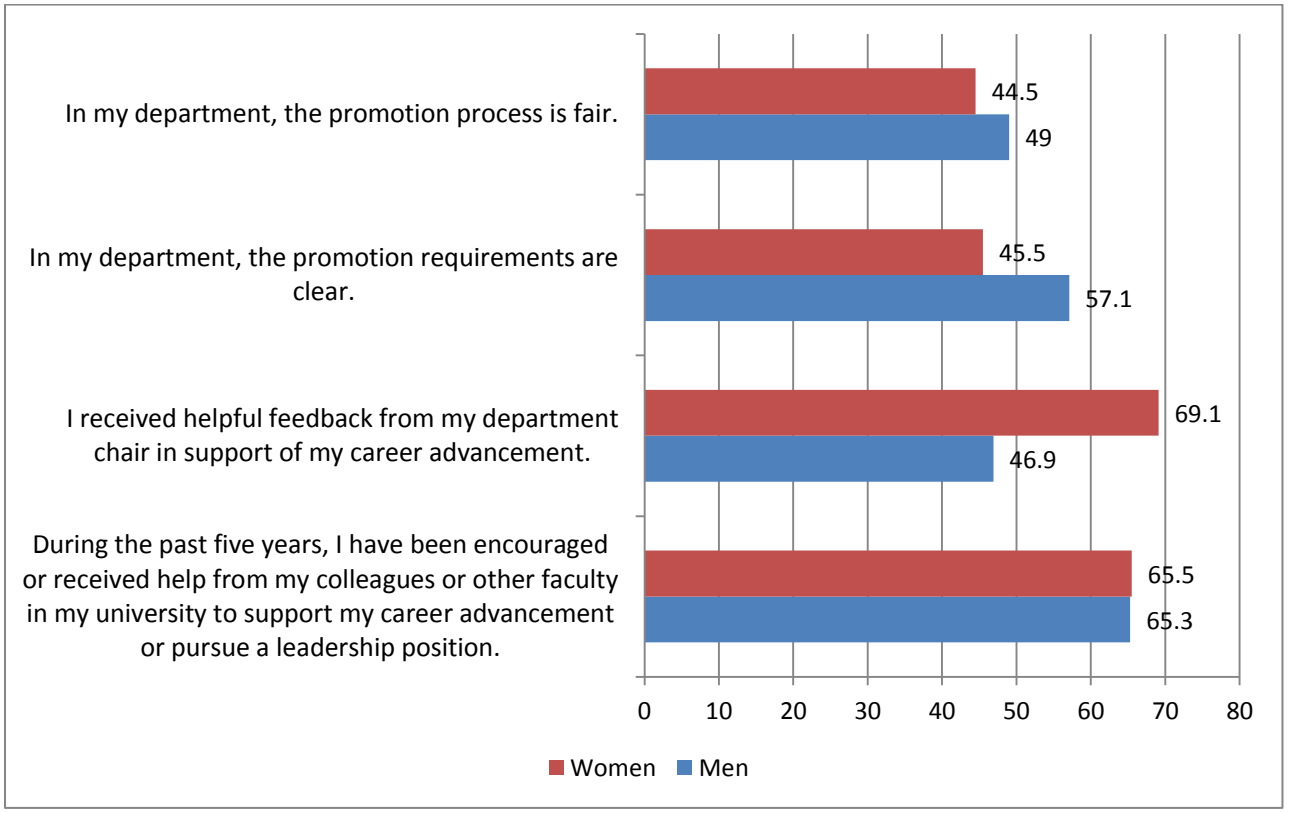


Figure 4. Satisfaction with promotion procedures

However, women faculty (M = 3.25, SD = 1.38) were less likely than men faculty (M = 3.71, SD = 1.08) to report having the freedom to choose what courses they teach ($F(1,157) = 4.279$, p = .040). Women faculty (M = 3.64, SD = 1.13) were also less likely than men faculty (M = 4.02, SD = 0.88) to report having the freedom to make choices in their everyday work life ($F(1,157) = 4.449$, p = .037) (Figure 5).

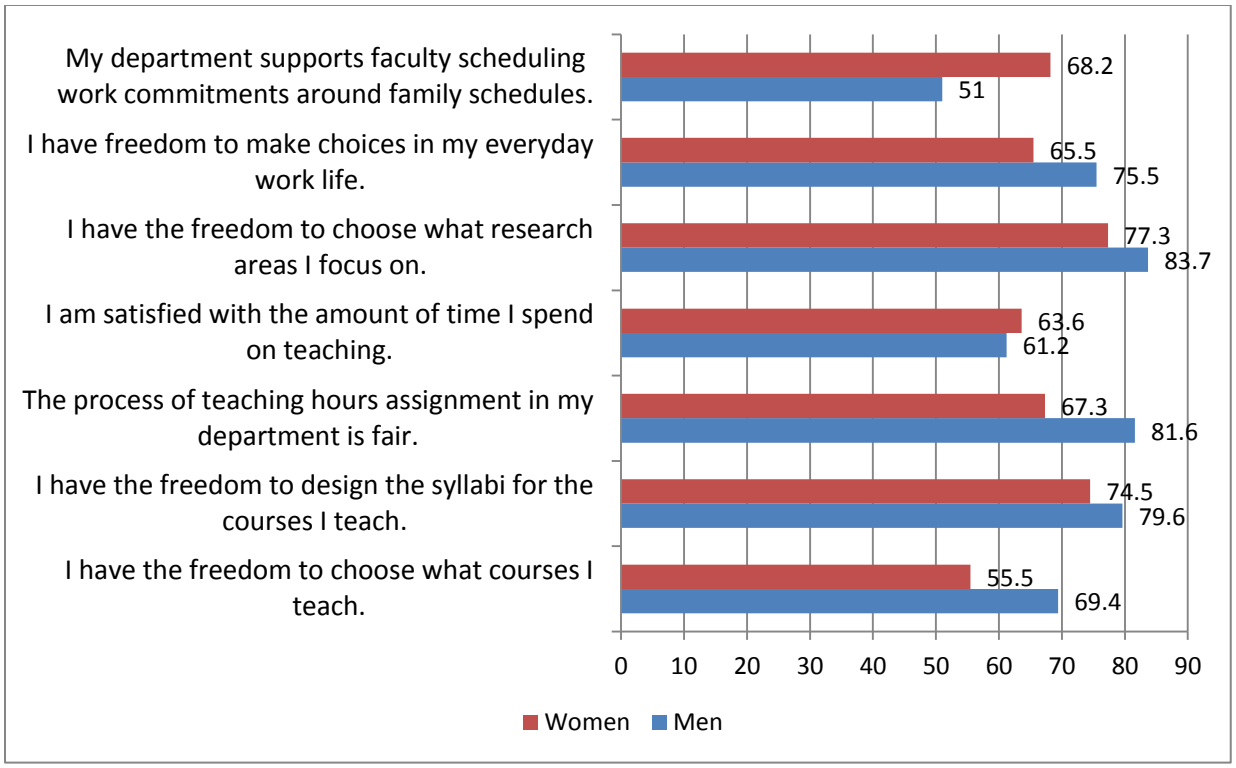


Figure 5. Satisfaction with workload distribution

Women faculty (M = 2.44, SD = 1.37) were more likely than men faculty (M = 1.80, SD = 0.96) to agree that their family commitments impede their career advancement ($F(1,154) = 8.768$, $p = .004$) (Figure 6). Women faculty (M = 3.49, SD = 1.31) were more likely than men faculty (M = 2.61, SD = 1.08) to agree that in their family, they are responsible for family chores to a greater extent than their partners ($F(1,154) = 16.577$, $p < .001$). At the same time, women faculty expressed satisfaction with the amount of time they spent on family commitments to the extent comparable to men (37.4% for women vs. 42.9% for men). First, this may suggest that women faculty learned to negotiate or not to problematize their family commitments. Second, the reasons for their dissatisfaction can go in two directions: they may be feeling they are spending too much of their time and compared to their

partners this distribution is not fair, or they may be feeling a lack of time they spent on their family responsibilities and are willing to spend more.

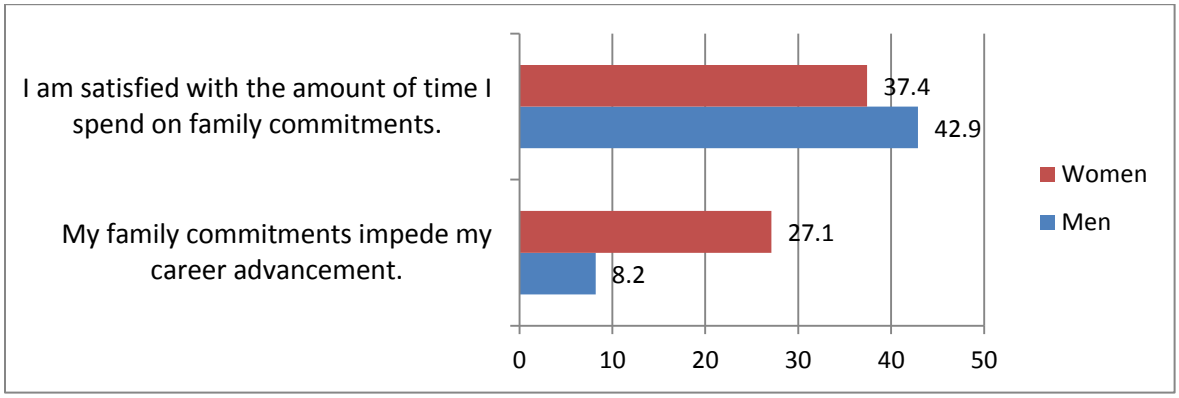


Figure 6. Satisfaction with work-family balance

The time spent on child care and/or domestic chores per day reported by the respondents confirms the finding of unequal distribution of family reponsibilities between men and women in their families. When looking at time spent on family chores per day split into smaller periods of time, we can see a descritipve though not statistically signficant difference (Figure 7). However, when collapsing these time periods into larger categories of (1) less than two hours and (2) three hours or more, we can see that men were more likely than women to report spending two hours or less on their family responsibilities (61.7% for men vs. 40.6% for women), and women were more likely to spend three hours and more on these activities (59.4% for women vs. 38.3% for men) (Figure 8).

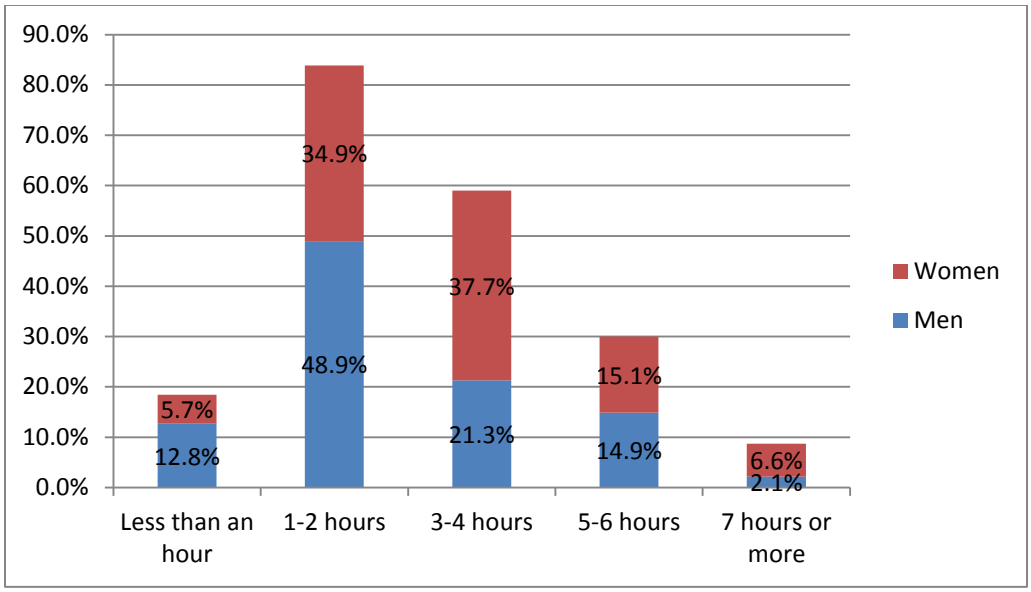
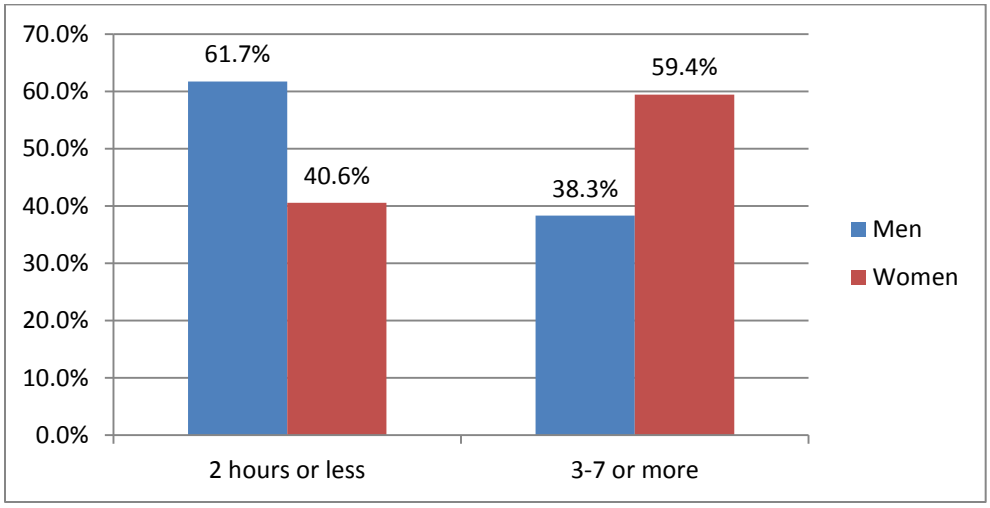


Figure 7. Time spent on child care and/or domestic chores per day



Statistically significant at *p< .05

Figure 8. Time spent on child care and/or domestic chores per day.

Women (*M* = 3.23, *SD* = 1.01) faculty were also less likely than men (*M* = 3.69, *SD* = 0.83) to be satisfied with their work-family balance as a contruct (*F*(1,154) = 7.931, *p* = .005) (Table 9).

The following figures below illustrate survey items that were not found to be statistically significant but that indicate important patterns in the levels of women faculty satisfaction and agency compared to men.

Specifically, women showed high levels of satisfaction with collegiality to the extent comparable to men (Figure 9). The only distinctive item was related to having a voice in decision-making in their department (77.3% for women vs. 91.8% for men). As evident in interview data that is discussed in the next chapter, women indeed communicated having less voice and not being perceived as serious as men in certain instances.

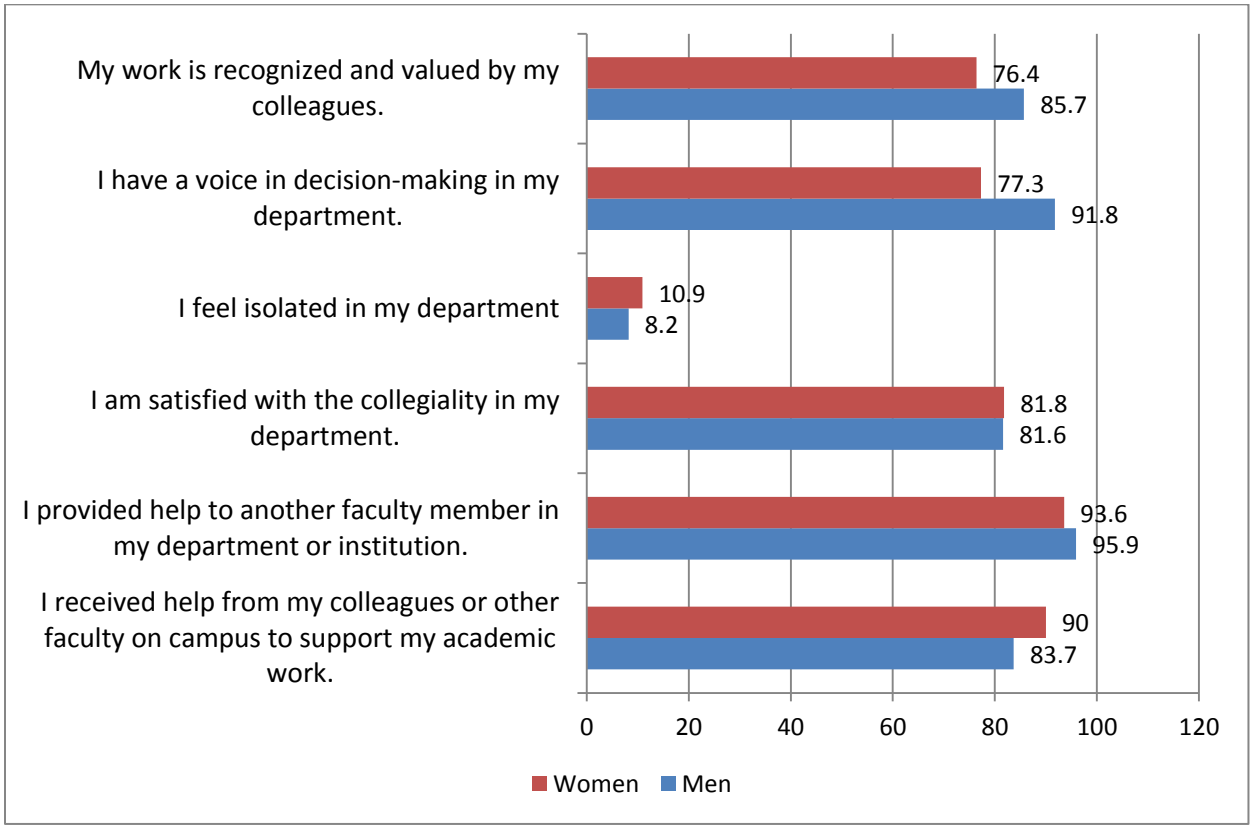


Figure 9. Satisfaction with collegiality

The survey items related to satisfaction with resources and overall support for professional development demostrate descriptive gender differences that may suggest

an interesting finding. More women than men indicated their knowledge of programs and resources existing in their department and university to support faculty (70.9% for women vs. 53.1% for men). This may point out to women's greater participation in projects, workshops, seminars, etc. Nevertheless, fewer women are satisfied with their salary (30.9% for women vs. 36.7% for men) (Figure 10). This finding is consistent with research conducted in Russia and focused on satisfaction of men and women with various aspects of their work. While men were found to be more satisfied with their salary, women were more satisfied with other aspects of their work such as security, their duties, schedule, and working conditions (Poplavskaya & Soboleva, 2017).

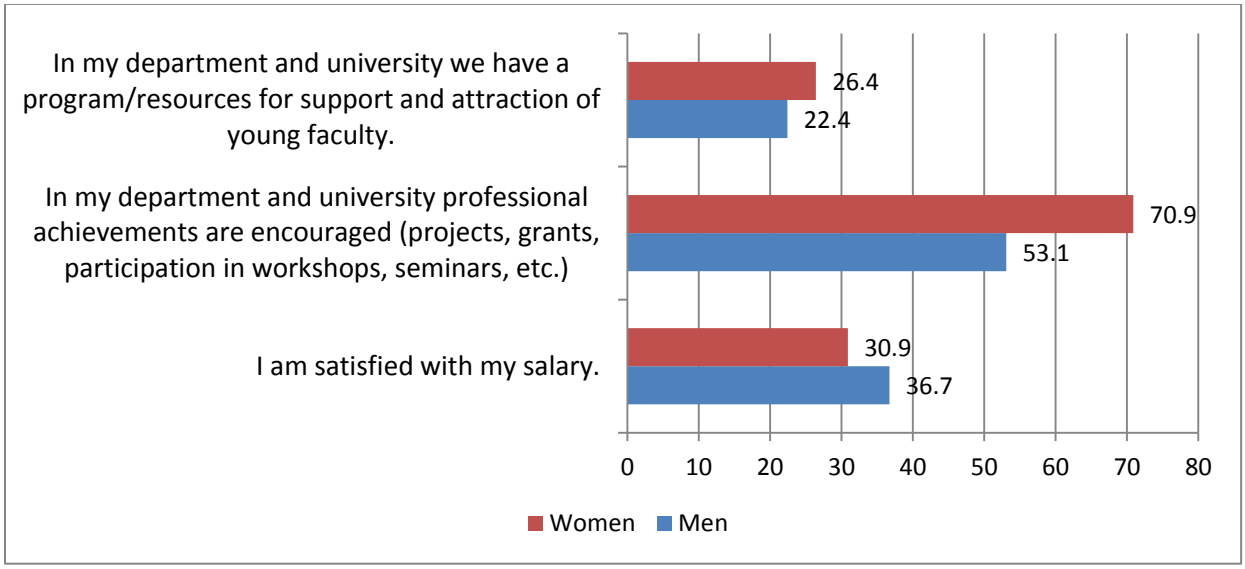


Figure 10. Satisfaction with resources and support

While women expressed having less control than men of the time they spent on work vs. their family chores, less control over advancement in their career, and having more concerns about opportunities for their academic progress and feeling more stuck in their ability to advance, these differeneces were not found to be statistically signfiicant and, thus, women overall showed having strong agency

perspectives (Figure 11). Correspondingly, while men scored higher than women on all items related to agency behavior construct, the differences were not statistically signficant, meaning that women and men had comparable levels of agency behavior (Figure 12).

Similar to agency perspectives and behavior, while women faculty scored lower than men faculty on their satisfaction with their research productivity (Figure 13), adminstrative leadership promotion and overall career satisfaction (Figure 14), these differences were not statistically signficant. Interestingly, though, women descriptively scored higher than men on their academic rank promotion. Further logistic regression was conducted on effects of having received helpful feedback from their department chair in support of their career advancement – a survey item on which women faculty scored statistically significantly higher – on academic promotion. Regression results revealed that receiving helpful feedback from their chair increased their academic promotion rates by 2.48 times (SE = .193, $Wald$ = 22.255, $p < .001$).

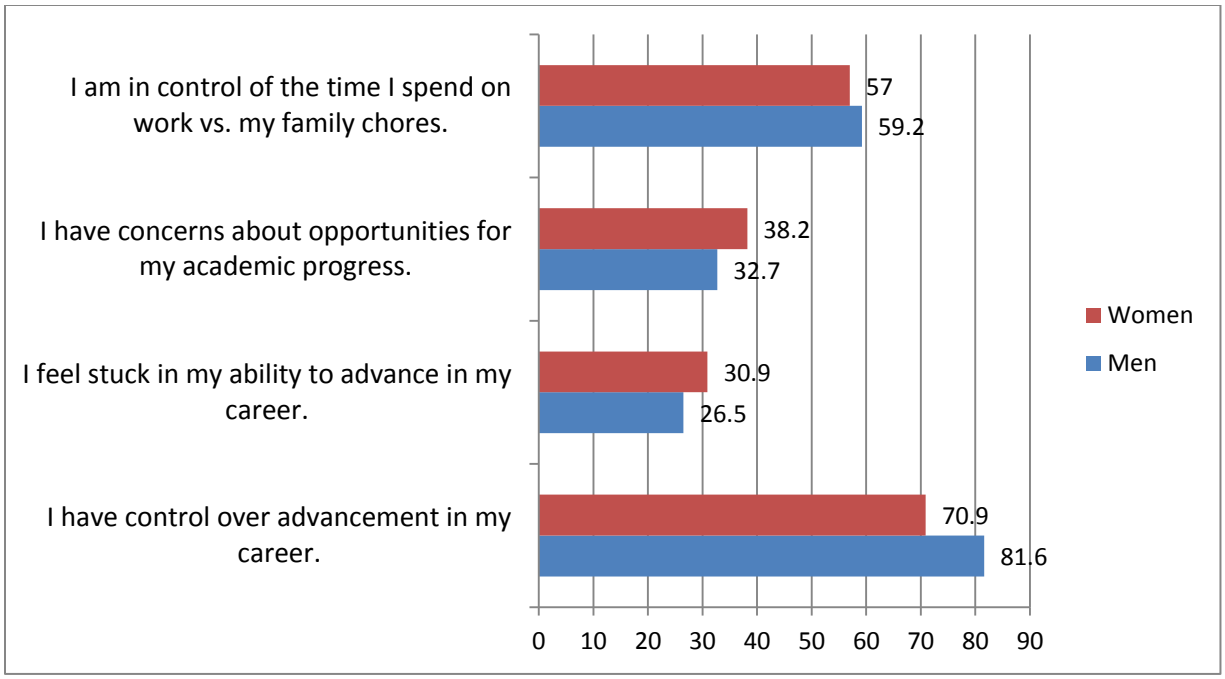


Figure 11. Agency Perspectives

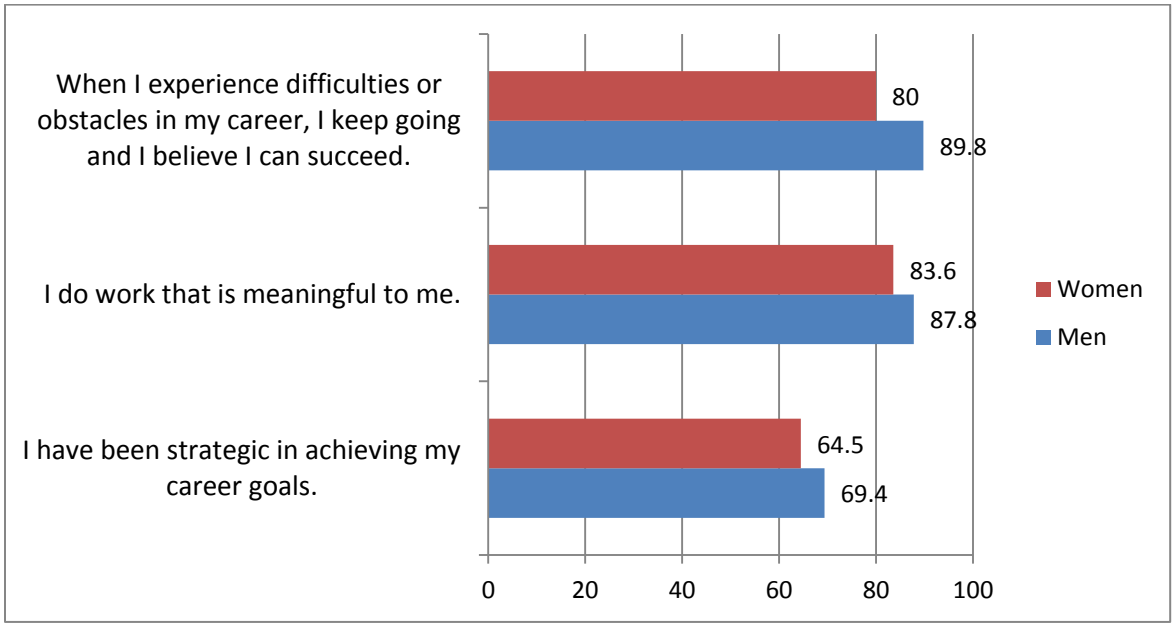


Figure 12. Agency Behavior

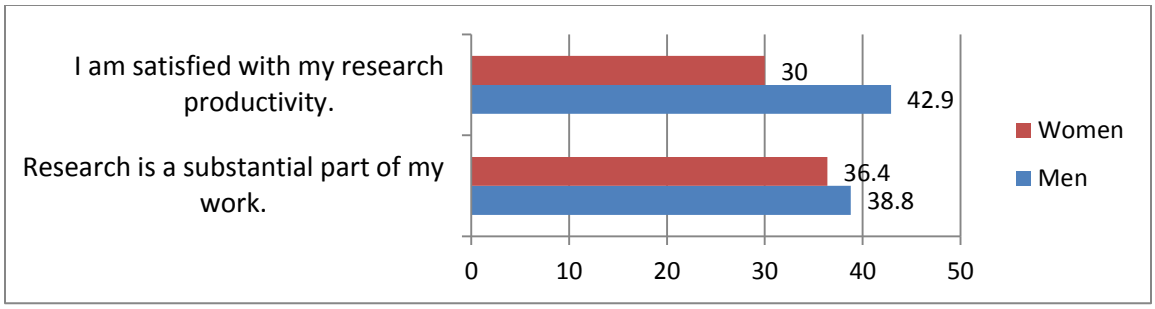


Figure 13. Satisfaction with Research Productivity

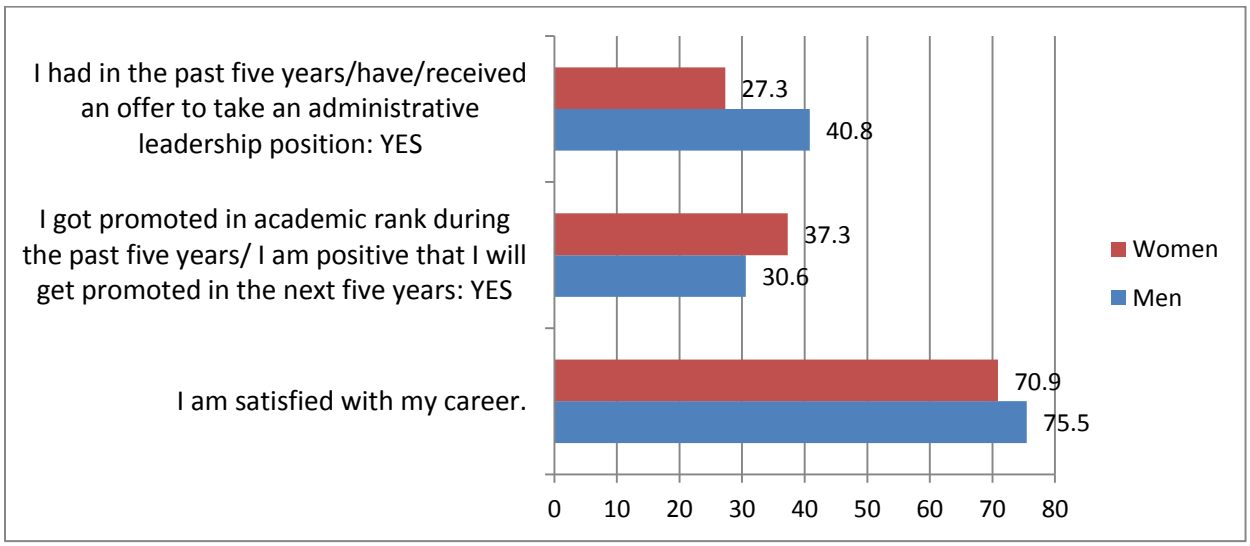


Figure 14. Career Satisfaction, Academic Rank Promotion, and Administrative Leadership Promotion

Rank Differences

As expected, associate professors (M = 3.73, SD = 1.34) were more likely than full professors (M = 3.00, SD = 1.73) to receive helpful feedback from their department chair in support of their career advancement ($F(3,151) = 3.825$, $p = .009$) (Table 8). Instructors (M = 2.67, SD = 1.51) were more likely than assistant professors (M = 1.33, SD = 0.96) and associate professors (M = 1.49, SD = 0.94) to feel isolated in their department ($F(3,151) = 2.774$, $p = .042$ and $p = .025$, correspondingly).

Instructors (M = 2.83, SD = 1.47) and assistant professors (M = 3.30, SD = 1.26) were less likely than full professors (M = 4.71, SD = 0.49) to have the freedom to choose what courses they teach (F(3,151) = 3.039, p = .039 and p = .033, correspondingly). Instructors (M = 2.83, SD = 1.17) were also less likely than assistant professors (M = 4.00, SD =0.98), associate professors (M = 4.28, SD = 0.79), and full professors (M = 4.57, SD = 0.53) to keep going and believe they can succeed when they experienced difficulties or obstacles in their career (F(3,151) = 6.602, p = .011, p < .001 and p = .002, correspondingly).

Assistant professors (M = 2.53, SD = 1.28) and associate professors (M = 2.83, SD = 1.36) were less likely than full professors (M = 4.29, SD = 0.95) to agree that research was a substantial part of their work *(*F(3,151) = 3.471, p = .009 and p = .032, correspondingly). Full professors were less likely than assistant and associate professors to spend time on teaching (Table 11).

Instructors (M = 2.83, SD = 0.75) and assistant professors (M = 3.43, SD = 1.24) were less likely than associate professors (M = 4.09, SD = 0.88) and full professors (M = 5.00, SD = 0) to be satisfied with their career (F(3,151) = 9.980, p = .012, p = .001, p = .002, and p = .001, correspondingly). Instructors (M = 2.67, SD = 1.63) were also more likely than full professors (M = 1.00, SD = 0) to report having situations in their work where they experienced gender prejudices (F(3,151) = 2.609, p = .033).

Additionally, when analyzing differences in the constructs, instructors (M = 3.22, SD = 0.78) were less likely than associate professors (M = 4.08, SD = 0.66) and full professors (M = 4.48, SD = 0.60) to report high levels of agency behavior

($F(3,151) = 4.547$, $p = .012$, and $p = .005$, correspondingly). Instructors ($M = 2.50$, $SD = 1.18$), assistant professors ($M = 2.46$, $SD = 1.14$) and associate professors ($M = 2.83$, $SD = 1.23$) were less likely than full professors ($M = 4.29$, $SD = 0.91$) to score on their research productivity ($F(3,151) = 4.805$, $p = .040$, $p = .002$, and $p = .012$, correspondingly). Associate professors (39.2%) and full professors (57.1%) were more likely than instructors and assistant professors to be promoted to an administrative leadership position ($X^2(3) = 16.407$, $p = .001$).

Discipline Differences

Faculty in STEM disciplines ($M = 4.25$, $SD = 0.84$) were more likely than faculty in social sciences and humanities ($M = 3.83$, $SD = 1.31$) to perceive the process of teaching hours assignment in their department as fair ($F(1,154) = 4.657$, $p = .032$) (Table 8). Faculty in STEM disciplines ($M = 1.96$, $SD = 1.36$) were less likely than faculty in social sciences and humanities ($M = 2.59$, $SD = 1.44$) to feel stuck in their ability to advance in their career, and less likely to have concerns about opportunities for their academic progress ($M = 2.36$, $SD = 1.27$ for STEM faculty and $M = 3.06$, $SD = 1.43$ for social sciences and humanities faculty, $F(1,154) = 7.116$, $p = .008$, $F(1,154) = 9.142$, $p = .003$, correspondingly). Faculty in STEM disciplines were more likely than faculty in social sciences and humanities to spend time on research and less time on student advising (Table 11).

Faculty in STEM disciplines ($M = 2.87$, $SD = 1.08$) were also less likely than faculty in social sciences and humanities ($M = 3.38$, $SD = 1.38$) to agree that in their family, they are responsible for family chores to a greater extent than their partner ($F(1,154) = 5.471$, $p = .021$). Faculty in STEM disciplines (25.9%) were also more

likely than faculty in social sciences and humanities (9.1%) to believe that gender plays a role in their discipline ($X^2(1) = 7.753$, $p = .006$). Faculty in STEM disciplines ($M = 3.72$, $SD = 0.68$) were more likely than faculty in social sciences and humanities ($M = 3.31$, $SD = 0.94$) to have stronger agency perspective ($F(1,153) = 7.724$, $p = .006$). Finally, faculty in STEM disciplines were more likely than faculty in social sciences and humanities to report higher levels of academic rank promotion (47.3% and 26.7%), and administrative leadership promotion (41.8% and 23.8%), $X^2(1) = 6.697$, $p = .008$, and $X^2(1) = 5.515$, $p = .016$, correspondingly.

Women in STEM vs. Social Sciences and Humanities Differences

Women in STEM disciplines ($M = 3.58$, $SD = 1.32$) were less likely than women in social sciences and humanities ($M = 4.16$, $SD = 1.21$) to agree about having freedom to choose what research areas to focus on. This could be related to funding issues, i.e. to research grants that cover specific areas or issues. Participants in STEM fields referred to their research to a large extent dependent on these grants. Faculty in social sciences and humanities raised numerous concerns about a lack of grants in their fields, which, on the one hand, decreases financial support for their research, and, on the other hand, does not impose limits on the research areas of their interest.

Women in STEM disciplines ($M = 2.33$, $SD = 1.27$) were less likely than women in social sciences and humanities ($M = 3.05$, $SD = 1.47$) to have concerns about opportunities for their academic progress, and were more likely to get promoted in academic rank (54.2% vs. 30.1%). However, women in STEM disciplines were more likely than women in social sciences and humanities to have experienced a situation in their work where their gender played a role ($M = 2.54$, $SD = 1.53$ vs. $M =$

1.86, *SD* = 1.16), more likely to have situations in their work where they experienced gender prejudices (*M* = 2.13, *SD* = 1.30 vs. *M* = 1.57, *SD* = 1.07), and to believe overall that gender plays a role in their discipline (37.5% vs. 7.4%) (Table 8a and Table 9a).

Disciplinary cultures with more ambiguity regarding promotion pathways reveal more biases and gender constraints that those with clearer guidelines and practices. This explains STEM faculty feeling less stuck and more optimistic about their career. Overall, Russian women faculty are highly satisfied with their career, collegiality, workload, and promotion. However, women in STEM appear the most vulnerable group when gender begins to play a role. This disadvantage is reinforced when other inequities come alive, such as those that are discussed later in qualitative and discussion chapters, e.g., unsecure maternity leave, reduced job security, and increasing emphasis on STEM and research.

Institutional Differences

The two institutions were very similar in evaluation of their work environments by their respondents (Table 8). The only statistical differences were related to their family-work balance and research productivity. Regional university respondents (*M* = 2.08, *SD* = 1.38) were more likely than technical university respondents (*M* = 1.59, *SD* = 1.10) to believe that their family commitments had an impact on their career considerations ($F(1,154) = 6.761$, $p = .048$). Technical university respondents (*M* = 3.11, *SD* = 0.98) were more likely than regional university respondents (*M* = 2.66, *SD* = 1.29) to be satisfied with their research productivity ($F(1,157) = 6.156$, $p = .045$), and to spend time on research (Table 11).

This finding is consistent with the national agenda of focusing on science and technology and the interview data illuminating that in 'hard' science faculty find themselves more engaged in research and feeling more reward and benefits of spending time on research than faculty in social sciences and humanities.

Other Relationships between Variables

Interestingly, faculty who reported spending 3-7 hours or more on their family responsibilities (M = 3.51, SD = 1.22) were more likely to feel in control of the time they spent on work vs. their family chores than those who spent 1-2 hours or less than an hour (M = 2.96, SD = 1.38) (F(1,149) = 6.876, p = .010). Also, those who were spending more time on their family needs (M = 3.94, SD = 1.16) were more likely than those who were spending less (M = 3.41, SD = 1.12) to agree that their department supported faculty scheduling work commitments around family schedules (F(1,149) = 8.093, p = .005). This suggests that faculty who perceived that their departments recognized and respected the time needed for their family, developed stronger agentic perspectives with regard to their work-family balance.

Faculty with children (M = 4.00, SD = 1.07) were more likely than faculty who did not have children (M = 3.42, SD = 1.18) to report that their department supported faculty scheduling work commitments around family schedules (F(1,148) = 9.646, p = .002). However, faculty with children (M = 2.48, SD = 1.30) were less likely than faculty who did not have children (M = 3.00, SD = 1.35) to agree that research was a substantial part of their work (F(1,150) = 5.801, p = .017).

When looking at interaction of gender and having children, women with children scored significantly lower on some items than men with children. For

instance, women with children (M = 3.44, SD = 1.09) were less likely than men with children (M = 4.32, SD = 0.58) to report having freedom to make choices in their everyday work life (F(3,148) = 3.536, p = .010). Women with children (M = 2.69, SD = 1.45) were also more likely than men with children (M = 1.58, SD = 0.61) to agree that their family commitments impede their career advancement (F(3,146) = 4.120, p = .008). Finally, women with children (M = 3.73, SD = 1.32) were more likely than men without children (M = 2.74, SD = 1.09) to report being responsible for family chores to a greater extent than their partner (F(3,146) = 6.321, p = .007). Surprisingly, though, this difference was even greater for women with children (M = 3.73, SD = 1.32) than men *with* children (M = 2.47, SD = 1.02) (F(3,146) = 6.321, p = .002). This finding emphasizes a substantially larger burden of family and child responsibilities placed on women, a burden that is recognized and accepted by both women and men.

Table 8. *Descriptive statistics on survey items: means and standard deviations, by groups*

Survey Item	Gender		Rank				Discipline		University	
	Men	Women	Instructor	Assistant	Associate	Full	Humanities /Social Sciences	STEM	Regional	Technical
Organizational Factors										
Promotion Procedures										
During the past five years, I have been encouraged or received help from my colleagues or other faculty in my university to support my career advancement or pursue a leadership position.	3.49 (1.29)	3.57 (1.36)	3.33 (1.51)	3.48 (1.41)	3.66 (1.26)	3.29 (1.60)	3.56 (1.34)	3.49 (1.36)	3.52 (1.39)	3.63 (1.15)
I received helpful feedback from my department chair in support of my career advancement.	3.10 (1.45)	3.73** (1.34)	3.67 (1.51)	3.35 (1.39)	3.73** (1.34)	3.00** (1.73)	3.65 (1.34)	3.31 (1.43)	3.52 (1.44)	3.58 (1.29)
In my department, the promotion requirements are clear.	3.31 (1.36)	3.19 (1.44)	3.17 (2.04)	3.38 (1.12)	3.16 (1.46)	4.14 (1.46)	3.17 (1.44)	3.31 (1.40)	3.18 (1.46)	3.37 (1.26)
	3.47	3.29	3.50	3.25	3.39	3.43	3.22	3.55	3.38	3.24

In my department, the promotion process is fair.	(1.12)	(1.27)	(1.52)	(1.08)	(1.26)	(1.51)	(1.28)	(1.20)	(1.27)	(1.10)
				Professional Relations/ Collegiality						
I received help from my colleagues or other faculty on campus to support my academic work.	4.10 (.94)	4.35 (.82)	4.33 (.82)	4.20 (.88)	4.28 (.89)	4.57 (.53)	4.26 (.91)	4.31 (.79)	4.31 (.88)	4.13 (.86)
I provided help to another faculty member in my department or institution.	4.41 (.57)	4.46 (.64)	4.50 (.55)	4.38 (.67)	4.46 (.62)	4.57 (.53)	4.46 (.66)	4.42 (.57)	4.45 (.65)	4.41 (.55)
I am satisfied with the collegiality in my department.	4.04 (1.02)	4.15 (.99)	4.33 (.82)	4.03 (1.16)	4.19 (.89)	4.29 (1.11)	4.06 (1.09)	4.25 (.82)	4.20 (.97)	3.85 (1.06)
I feel isolated in my department.	1.57 (.93)	1.58 (1.05)	2.67* (1.51)	1.53* (.96)	1.49* (.94)	1.43 (1.13)	1.56 (1.03)	1.58 (.99)	1.61 (1.03)	1.44 (.94)
I have a voice in decision-making in my department.	4.37 (.91)	4.10 1.09)	3.50 (1.22)	4.00 (1.11)	4.31 (.95)	4.71 (.49)	4.16 (1.09)	4.22 (.97)	4.17 (1.08)	4.21 (.93)
My work is recognized	4.16	4.07	4.00	4.15	4.08	4.71	4.09	4.15	4.08	4.16

and valued by my colleagues.	(.80)	(.93)	(.89)	(1.00)	(.85)	(.49)	(.99)	(.68)	(.88)	(.87)
					Workload Distribution					
I have the freedom to choose what courses I teach.	3.71 1.08)	3.25* (1.38)	2.83* (1.47)	3.30* (1.26)	3.45 (1.27)	4.71* (.49)	3.29 (1.39)	3.62 (1.08)	3.33 (1.31)	3.61 (1.26)
I have the freedom to design the syllabi for the courses I teach.	4.06 (1.01)	3.76 (1.41)	3.50 (1.38)	4.05 (.96)	3.85 (1.35)	4.29 (1.50)	3.77 (1.43)	4.04 (1.02)	3.93 (1.27)	3.61 (1.39)
The process of teaching hours assignment in my department is fair.	4.10 (1.06)	3.91 (1.22)	3.83 (1.33)	3.70 (1.22)	4.12 (1.14)	4.00 (1.41)	3.83 (1.31)	4.25* (.84)	4.04 (1.16)	3.74 (1.22)
I am satisfied with the amount of time I spend on teaching.	3.53 (1.29)	3.58 (1.40)	4.50 (.84)	3.38 (1.48)	3.57 (1.36)	4.00 (1.15)	3.62 (1.33)	3.47 (1.45)	3.50 (1.40)	3.76 (1.24)
I have the freedom to choose what research areas I focus on.	4.16 (1.16)	4.03 (1.24)	3.50 (1.22)	3.93 (1.23)	4.16 (1.22)	4.29 (1.50)	4.11 (1.25)	4.00 (1.19)	4.06 (1.24)	4.11 (1.16)
I have the freedom to make choices in my everyday work life.	4.02 (.88)	3.64* (1.13)	3.17 (1.17)	3.73 (1.06)	3.79 (1.07)	4.29 (.76)	3.73 (1.07)	3.78 (1.10)	3.78 (1.06)	3.69 (1.10)

My department supports faculty scheduling work commitments around family schedules.	3.43 (1.19)	3.81 (1.13)	4.50 (.55)	3.50 (1.24)	3.75 (1.09)	3.14 (1.77)	3.71 (1.20)	3.63 (1.09)	3.70 (1.21)	3.68 (1.00)
Resources and Support										
I am satisfied with my salary.	2.78 (1.26)	2.50 (1.31)	2.33 (1.21)	2.28 (1.22)	2.70 (1.35)	2.71 (.95)	2.51 (1.32)	2.69 (1.26)	2.57 (1.29)	2.64 (1.35)
In my department and university professional achievements are encouraged (projects, grants, participation in workshops, seminars, etc.)	3.43 (.98)	3.76 (1.04)	3.83 (1.17)	3.43 (.96)	3.74 (1.04)	3.71 (1.38)	3.70 (1.01)	3.56 (1.08)	3.72 (1.06)	3.41 (.99)
In my department and university we have programs/resources to support and attract young faculty.	2.47 (1.24)	2.83 (1.21)	2.67 (1.51)	2.63 (.98)	2.75 (1.32)	2.71 (1.50)	2.81 (1.19)	2.58 (1.30)	2.69 (1.27)	2.77 (1.06)
Work-Family Balance										
My family commitments impede my career advancement.	1.80 (.96)	2.44** (1.37)	2.83 (.75)	2.17 (1.32)	1.57 (.30)	4.43 (1.13)	2.39 (1.38)	1.98 (1.05)	2.28 (1.28)	2.11 (1.31)
	3.18	2.90	2.83	2.83	2.99	3.71	3.01	2.98	2.92	3.19

I am satisfied with the amount of time I spend on family commitments.	(1.17)	(1.26)	(.75)	(1.19)	(1.23)	(1.60)	(1.26)	(1.17)	(1.27)	(1.10)
					Agency Perspectives					
I have control over advancement in my career.	3.84 (1.23)	3.68 (1.07)	4.33 (.82)	3.58 (1.06)	3.82 (1.06)	3.43 (1.72)	3.69 (1.06)	3.78 (1.24)	3.68 (1.18)	3.92 (.87)
I feel stuck in my ability to advance in my career.	2.22 (1.37)	2.43 (1.46)	2.50 (1.52)	2.73 (1.34)	2.24 (1.44)	1.86 (1.57)	2.59 (1.44)	1.96** (1.36)	2.42 (1.48)	2.18 (1.25)
I have concerns about opportunities for my academic progress.	2.65 (1.30)	2.87 (1.45)	2.50 (1.38)	3.15 (1.23)	2.75 (1.43)	1.71 (1.50)	3.06 (1.43)	2.36** (1.27)	2.80 (1.41)	2.82 (1.39)
I am in control of the time I spend on work vs. my family chores.	3.41 (1.29)	3.24 (1.34)	3.50 (.55)	3.38 (1.25)	3.20 (1.33)	3.86 (1.95)	3.22 (1.35)	3.41 (1.27)	3.27 (1.35)	3.38 (1.25)
					Agency Behavior					
I have been strategic in achieving my career goals.	3.86 (1.04)	3.65 (1.03)	3.33 (.82)	3.65 (1.05)	3.72 (1.07)	4.43 (.79)	3.68 (1.05)	3.76 (1.04)	3.75 (1.00)	3.61 (1.15)
I do work that is meaningful to me.	4.29 (.79)	4.15 (.97)	3.50 (1.22)	4.15 (.89)	4.25 (.84)	4.43 (1.13)	4.19 (.93)	4.16 (.89)	4.16 (.93)	4.28 (.89)
When I experience	4.27 (.70)	4.15 (.97)	2.83** (1.17)	4.00** (.98)	4.28** (.79)	4.57** (.53)	4.16 (.93)	4.20 (9.83)	4.21 (.93)	4.11 (.73)

difficulties or obstacles in my career, I keep going and I believe I can succeed.										
					Research Productivity					
Research is a substantial part of my work.	2.94 (1.38)	2.75 (1.37)	3.00 (1.67)	2.53** (1.28)	2.83** (1.36)	4.29** (.95)	2.72 (1.38)	2.93 (1.37)	2.69 (1.44)	3.16 (1.05)
I am satisfied with my research productivity.	2.98 (1.45)	2.62 (1.31)	2.00 (.89)	2.40 (1.29)	2.83 (1.34)	4.29 (1.11)	2.68 (1.36)	2.80 (1.39)	2.62 (1.39)	3.08 (1.17)
					Career Satisfaction					
I am satisfied with my career.	3.96 (.98)	3.85 (1.10)	2.83** (.75)	3.43** (1.24)	4.09** (.88)	5.00** (.0)	3.90 (1.12)	3.94 (.98)	3.84 (1.09)	4.00 (.98)
					Other items (not included in the final SEM model)					
I am willing to pursue a leadership position.	3.02 (1.60)	2.80 (1.38)	3.17 (1.83)	2.93 (1.31)	2.82 (1.50)	2.43 (1.39)	2.90 (1.40)	2.82 (1.55)	2.78 (1.43)	3.16 (1.49)
I have leadership qualities.	3.90 (1.10)	3.75 (1.06)	3.00 (.89)	3.75 (1.13)	3.90 (1.00)	3.29 (1.70)	3.83 (1.10)	3.76 (1.04)	3.85 (1.06)	3.61 (1.10)
I wish I had more time to spend on research.	4.22 (1.05)	4.11 (.99)	3.50 (1.38)	3.83 (1.12)	4.30 (.93)	4.43 (.79)	4.15 (1.00)	4.16 (1.03)	4.17 (1.03)	4.08 (.94)
I have experienced a situation in my work where my gender played	2.24 (1.41)	2.05 (1.29)	3.33 (1.63)	2.00 (1.13)	2.08 (1.35)	1.71 (1.25)	2.05 (1.27)	2.15 (1.42)	2.15 (1.34)	2.00 (1.25)

a role.										
I had situations in my work where I experienced gender prejudices.	1.71 (1.00)	1.70 (1.14)	2.67* (1.63)	1.78 (1.14)	1.69 (1.06)	1.00* (0)	1.70 (1.12)	1.69 (1.07)	1.73 (1.12)	1.63 (1.02)
My family commitments had an impact on my career considerations.	1.88 (1.20)	2.01 (1.37)	2.00 (126)	2.00 (1.26)	2.00 (1.36)	1.00 (0)	1.91 (1.36)	2.09 (1.25)	2.08 (1.38)	1.59* (1.1)
In my family, I am responsible for family chores to a greater extent than my partner.	2.61 (1.08)	3.49*** (1.31)	3.17 (1.17)	3.25 (1.30)	2.29 (1.70)	3.23 (1.29)	3.38 (1.38)	2.87* (1.08)	3.21 (1.35)	3.22 (1.18)
Overall, I believe gender plays a role in my discipline. (% Yes)	16.7%	14.8%	33.3%	12.5%	16.2%	0%	9.1%	25.9%**	15.8%	12.8%

Significant differences at *$p < .05$. **$p < .01$. ***$p < .001$.

Table 8a. *Descriptive statistics on survey items: means and standard deviations, women respondents, by discipline*

Survey Item	Humanities/ Social Sciences	STEM
Organizational Factors		
Promotion Procedures		
During the past five years, I have been encouraged or received help from my colleagues or other faculty in my university to support my career advancement or pursue a leadership position.	3.58 (1.36)	3.50 (1.41)
I received helpful feedback from my department chair in support of my career advancement.	3.77 (1.34)	3.58 (1.41)
In my department, the promotion requirements are clear.	3.16 (1.44)	3.25 (1.51)
In my department, the promotion process is fair.	3.22 (1.28)	3.46 (1.28)
Professional Relations/ Collegiality		
I received help from my colleagues or other faculty on campus to support my academic work.	4.30 (.88)	4.54 (.59)
I provided help to another faculty member in my department or institution.	4.47 (.68)	4.42 (.50)
I am satisfied with the collegiality in my department.	4.16 (1.03)	4.21 (.93)
I feel isolated in my department.	1.57 (1.06)	1.58 (1.06

I have a voice in decision-making in my department.	4.08 (1.16)	4.13 (.90)
My work is recognized and valued by my colleagues.	4.11 (.97)	4.00 (.78)
Workload Distribution		
I have the freedom to choose what courses I teach.	3.24 (1.42)	3.33 (1.20)
I have the freedom to design the syllabi for the courses I teach.	3.73 (1.48)	3.92 (1.14)
The process of teaching hours assignment in my department is fair.	3.87 (1.31)	4.13 (.90)
I am satisfied with the amount of time I spend on teaching.	3.60 (1.39)	3.54 (1.53)
I have the freedom to choose what research areas I focus on.	4.16 (1.21)	3.58* (1.32)
I have the freedom to make choices in my everyday work life.	3.69 (1.08)	3.42 (1.32)
My department supports faculty scheduling work commitments around family schedules.	3.80 (1.17)	3.83 (1.13)
Resources and Support		
I am satisfied with my salary.	2.46 (1.34)	2.58 (1.21)
In my department and university professional achievements are encouraged (projects, grants, participation	3.80 (1.01)	3.63 (1.21)

in workshops, seminars, etc.)		
In my department and university we have programs/resources to support and attract young faculty.	2.88 (1.20)	2.75 (1.26)
Work-Family Balance		
My family commitments impede my career advancement.	2.51 (1.44)	2.26 (1.10)
I am satisfied with the amount of time I spend on family commitments.	2.95 (1.31)	2.78 (1.04)
Agency Perspectives		
I have control over advancement in my career.	3.67 (1.06)	3.67 (1.17)
I feel stuck in my ability to advance in my career.	2.55 (1.44)	2.04 (1.52)
I have concerns about opportunities for my academic progress.	3.05 (1.47)	2.33* (1.27)
I am in control of the time I spend on work vs. my family chores.	3.16 (1.38)	3.48 (1.16)
Agency Behavior		
I have been strategic in achieving my career goals.	3.64 (1.05)	3.67 (1.01)
I do work that is meaningful to me.	4.17 (.95)	4.00 (1.06)

When I experience difficulties or obstacles in my career, I keep going and I believe I can succeed.	4.14 (.99)	4.08 (.93)
Research Productivity		
Research is a substantial part of my work.	2.67 (1.39)	2.92 (1.38)
I am satisfied with my research productivity.	2.61 (1.34)	2.58 (1.25)
Other items (not included in the final SEM model)		
I am willing to pursue a leadership position.	2.81 (1.40)	2.79 (1.35)
I have leadership qualities.	3.86 (1.17)	3.46 (.83)
I wish I had more time to spend on research.	4.13 (1.01)	4.08 (.97)
I have experienced a situation in my work where my gender played a role.	1.86 (1.16)	2.54* (1.53)
I had situations in my work where I experienced gender prejudices.	1.57 (1.07)	2.13* (1.30)
My family commitments had an impact on my career considerations.	1.94 (1.41)	2.30 (1.22)
In my family, I am responsible for family chores to a greater extent than my partner.	3.55 (1.35)	3.17 (1.11)
Overall, I believe gender plays a role in my discipline. (% Yes)	7.4%	37.5%**

Significant differences at *$p < .05$. **$p < .01$. ***$p < .001$.

Table 9. *Descriptive statistics on key constructs: means and standard deviations, by gender and rank*

Construct	Gender		Rank			
	Men	Women	Instructor	Assistant	Associate	Full
Promotion Procedures	3.34 (.93)	3.44 (1.05)	3.42 (1.49)	3.36 (.97)	3.48 (.99)	3.21 (1.29)
Collegiality	4.25 (.57)	4.26 (.68)	4.00 (.78)	4.20 (.74)	4.30 (.58)	4.57 (.63)
Workload Distribution	3.86 (.74)	3.73 (.81)	3.69 (.80)	3.65 (.75)	3.81 (.79)	4.10 (.98)
Resources and Support	2.89 (.93)	3.03 (.93)	2.94 (1.18)	2.77 (.83)	3.06 (.96)	3.05 (1.01)
Organizational Factors	3.59 (.65)	3.62 (.71)	3.51 (.81)	3.50 (.66)	3.66 (.67)	3.62 (.68)
Work-Family Balance	3.69 (.83)	3.23 (1.01)**	3.00 (.71)	3.17 (.92)	3.41 (.98)	4.07 (1.02)
Agency Perspectives	3.59 (.82)	3.40 (.91)	3.71 (.73)	3.27 (.76)	3.51 (.88)	3.93 (1.34)
Agency Behavior	4.14 (.61)	3.98 (.71)	3.22 (.78)*	3.93 (.67)	4.08 (.66)*	4.48 (.60)*
Career Satisfaction	3.96 (.98)	3.85 (1.10)	2.83 (.75)**	3.43 (1.24)**	4.09 (.88)**	5.00 (.00)**
Research Productivity	2.96 (1.36)	2.68 (1.18)	2.50 (1.18)*	2.46 (1.14)*	2.83 (1.23)*	4.29 (.91)*
Academic Rank Promotion (% Yes)	30.6%	37.3%	50.0%	17.5%**	43.1%**	0%
Administrative Leadership Promotion (% Yes)	40.8%	27.3%	0%	10.0%**	39.2%**	57.1%

Response scales for items are 1 (strongly disagree) to 5 (strongly agree). Significant differences at *$p < .05$. **$p < .01$. ***$p < .001$.

Table 9a. *Descriptive statistics on key constructs: means and standard deviations, women respondents, by discipline*

Construct	Humanities/ Social Sciences	STEM
Promotion Procedures	3.43 (1.02)	3.45 (1.19)
Collegiality	4.26 (.73)	4.28 (.53)
Workload Distribution	3.73 (.82)	3.73 (.77)
Resources and Support	3.04 (.90)	2.99 (1.08)
Organizational Factors	3.61 (.71)	3.64 (.74)
Work-Family Balance	3.22 (1.09)	3.26 (.65)
Agency Perspectives	3.31 (.94)	3.70 (.68)
Agency Behavior	3.98 (.69)	3.92 (.78)
Career Satisfaction	3.88 (1.15)	3.71 (.95)
Research Productivity	2.64 (1.19)	2.75 (1.18)
Academic Rank Promotion (% Yes)	30.1%	54.2%*
Administrative Leadership Promotion (% Yes)	24.1%	29.2%

Response scales for items are 1 (strongly disagree) to 5 (strongly agree). Significant differences at *$p < .05$. **$p < .01$. ***$p < .001$.

Table 10. *Descriptive statistics on key constructs: means and standard deviations, by groups*

Construct	Discipline		University	
	STEM	Humanities/ Social Sciences	Regional	Technical
Promotion Procedures	3.41 (1.01)	3.40 (1.03)	3.40 (1.08)	3.45 (.80)
Collegiality	4.29 (.52)	4.24 (.71)	4.27 (.68)	4.24 (.51)
Workload Distribution	3.85 (.71)	3.72 (.83)	3.78 (.76)	3.76 (.88)
Resources and Support	2.94 (1.00)	3.01 (.90)	2.99 (.96)	2.94 (.87)
Organizational Factors	3.64 (.64)	3.59 (.71)	3.62 (.72)	3.59 (.59)
Work-Family Balance	3.50 (.85)	3.31 (1.04)	3.32 (1.00)	3.54 (.90)
Agency Perspectives	3.72 (.68)**	3.31 (.94)	3.43 (.92)	3.58 (.73)
Agency Behavior	4.04 (.71)	4.01 (.67)	4.04 (.68)	4.01 (.69)
Career Satisfaction	3.84 (.98)	3.90 (1.12)	3.84 (1.09)	4.00 (.98)
Research Productivity	2.86 (1.31)	2.70 (1.22)	2.66 (1.29)	3.11 (.98)*
Academic Rank Promotion (% Yes)	47.3%*	26.7%	36.6%	30.8%
Administrative Leadership Promotion (% Yes)	41.8%*	23.8%	30.9%	30.8%

Response scales for items are 1 (strongly disagree) to 5 (strongly agree). Significant differences at *$p < .05$. **$p < .01$. ***$p < .001$.

Table 11. *Number of hours per week working at the university: means and standard deviations, by type of activity*

Activity	Gender		Rank				Discipline		University	
	Men	Women	Instructor	Assistant	Associate	Full	Humanities/ Social Sciences	STEM	Regional	Technical
Teaching	22.98	24.48	14.33	25.19*	24.95*	13.83	24.26	23.68	24.19	23.35
	(11.23)	(10.33)	(7.06)	(10.82)	(10.14)	(4.58)	(10.40)	(11.25)	(11.04)	(9.06)
Research	7.65	5.95	9.17	4.94	6.88	10.20	5.25	8.69**	5.90	9.04*
	(7.24)	(7.21)	(11.14)	(7.92)	(6.69)	(7.36)	(5.05)	(9.63)	(7.11)	(7.35)
Student Advising	8.98	9.79	3.33	8.76	10.57	8.20	10.93	7.40*	9.43	9.98
	(8.17)	(10.36)	(1.50)	(6.97)	(10.95)	(6.94)	(10.83)	(7.24)	(9.81)	(9.34)
Administrative Work/Service	7.64	5.31	3.83	6.45	5.77	5.20	5.56	6.90	6.27	5.18
	(7.24)	(7.05)	(3.49)	(7.13)	(6.87)	(5.59)	(7.26)	(7.18)	(7.49)	(5.46)
Other	4.43	13.50	0	6.80	10.86	2.00	6.86	10.67	5.87	13.00
	(3.50)	(13.16)		(5.31)	(12.89)	(0)	(7.43)	(12.86)	(4.85)	(14.87)
Total	47.19	44.39	30.67*	42.94	48.10*	33.83*	44.11	47.66	45.40	44.76
	(17.46)	(19.18)	(12.44)	(16.97)	(19.38)	(15.93)	(19.06)	(18.14)	(18.12)	(20.70)

Significant differences at *$p < .05$. **$p < .01$. ***$p < .001$.

Note: 'Other' type of activity may include administrative and course plans paperwork, and research grants related paperwork.

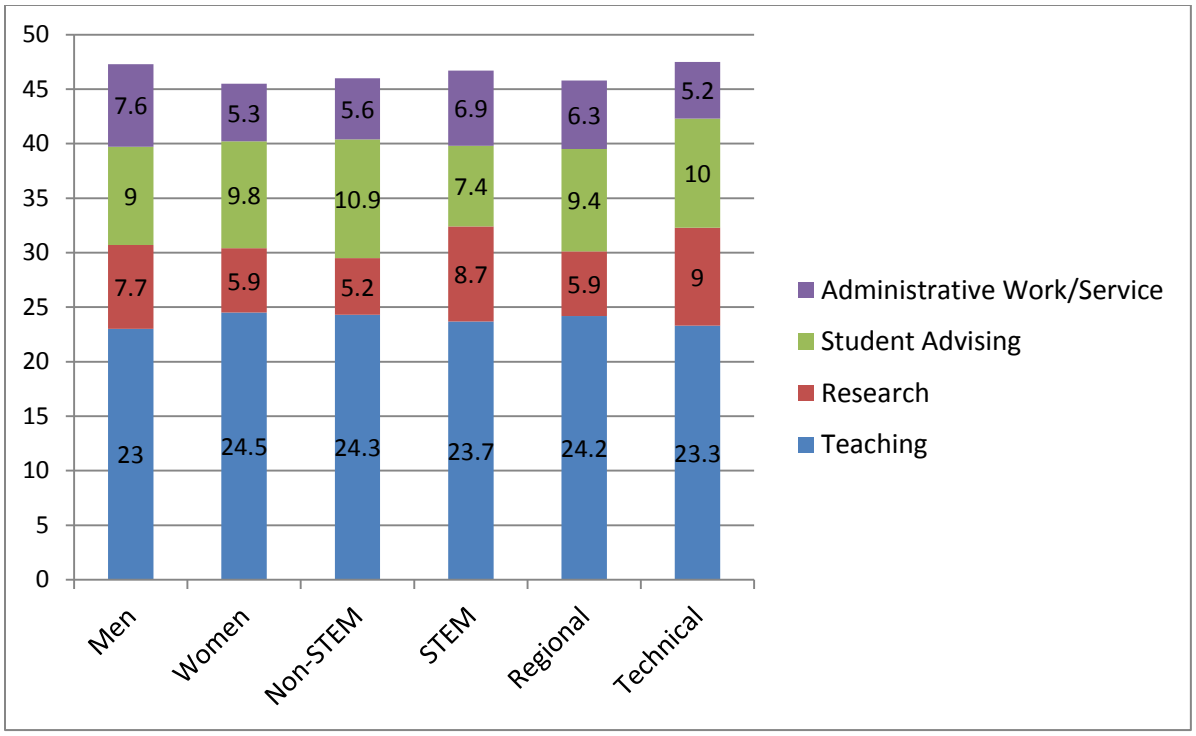


Figure 15. Number of hours per week spent on work activities

Establishing Causality

This section covers results from SEM, multiple linear and binary logistic regression analyses.

SEM Results

After construct validation, I applied structural equation modeling (SEM) on the final measurement model using latent variable path analysis (LVPA) to test structural links between organizational factors construct and faculty outcomes such as research productivity, career satisfaction, and promotion in academic rank and in an administrative leadership position, via agency perspectives and agency behavior. The SEM allows to test direct and indirect effects of multiple latent variables on each other, i.e., a priori theoretically driven structural links among them (Byrne, 2013; Hancock & Mueller, 2013; Kline, 2016). SEM analysis can also account for

measurement error which is typical in surveys of perceptions and behaviors. In the initial SEM model all connections were positive. See Figure 16 for the initial structural model.

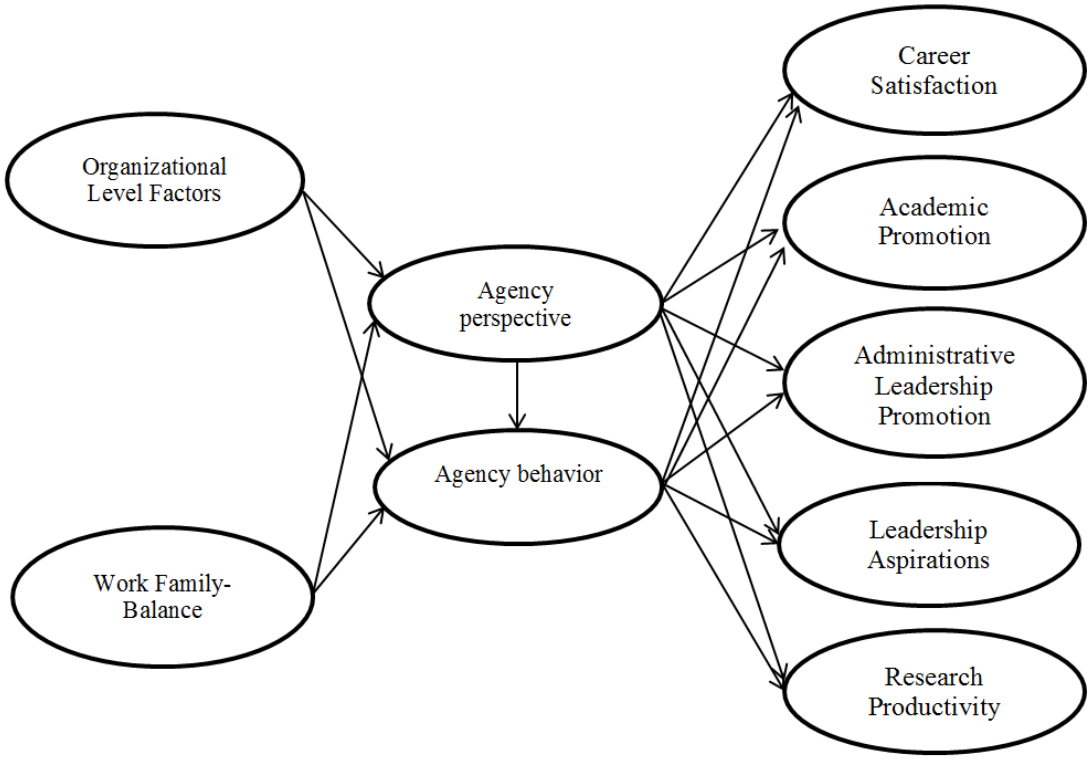


Figure 16. Initial SEM model

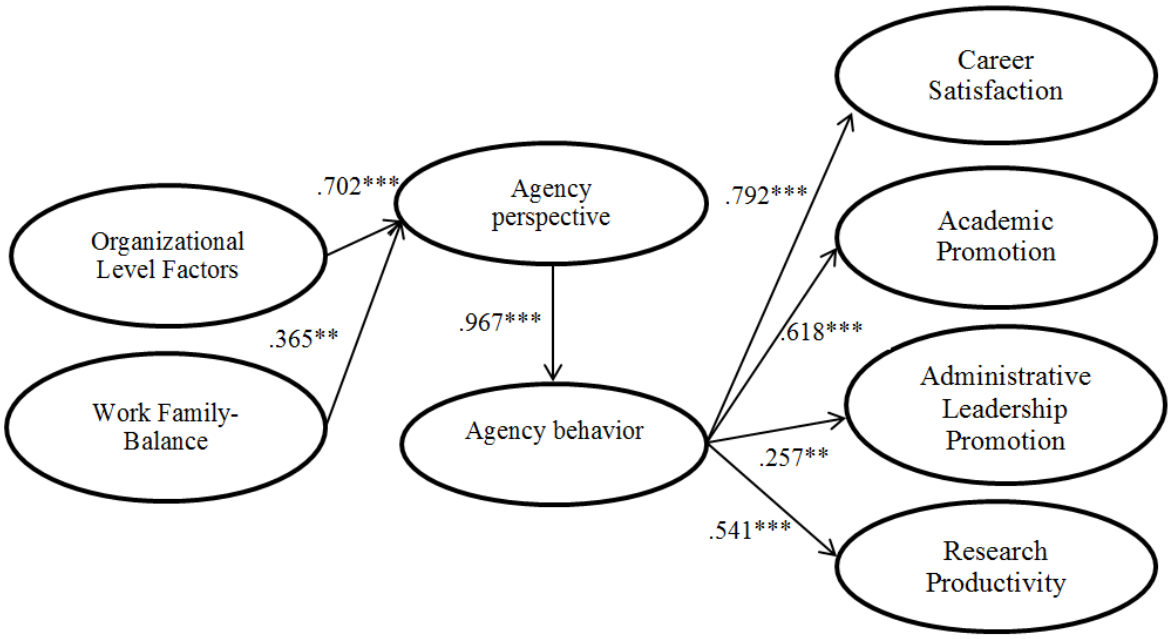
Because variables used in the study were treated as categorical, I used weighed least squares means and variance adjusted method (WLSMV): "a robust estimator which does not assume normally distributed variables and provides the best option for modeling categorical or ordered data" (Brown, 2006 as cited in Proitsi et al., 2011, p. 435). When determining model fit, WLSMV difference testing was done using the DIFFTEST option.

Besides the difference testing, I used comparative fit index (CFI), and the root mean square error of approximation (RMSEA). The use of multiple measures allows having a better understanding of the model fit. Although no perfectly defined

standards for these measures exist, I relied on empirically derived recommendations (Hu & Bentler, 1999). CFI values of 0.95 and higher indicate an excellent model fit, although values greater than 0.80 are also considered suitable. RMSEA values of 0.06 and lower are typically considered appropriate (Hu & Bentler, 1999). The final path analysis model resulted in good model fit indices: RMSEA=.056, CI [0.049, 0.063] and CFI=.894. See Figure 17 for the final structural model. In Table 7 I provide descriptive statistics and standardized loadings for the final structural model.

Several survey items were removed from the final model due to low responses, as well as their low CFA loadings and non-significant SEM results. These items included: "I have experienced a situation in my work where my gender played a role", and "I had situations in my work where I experienced gender prejudices", "I am willing to pursue a leadership position", "I have leadership qualities", "I wish I had more time to spend on research", "My family commitments had an impact on my career considerations", "In my family, I am responsible for family chores to a greater extent than my partner". However, these items have important descriptive value and will be referred to in the discussion section.

Organizational factors exerted a strong positive influence and work-family balance had a medium positive effect on faculty agency perspectives which shaped agency behavior. Agency behavior had a strong positive influence on faculty outcomes such as career satisfaction, academic rank promotion, administrative leadership position promotion, and research productivity (Figure 17). The model explained 29.3% of the variance in the latent variable of research productivity (r^2= 0.293).



*p < .05. **p < .01. ***p < .001

Figure 17. Final SEM model of latent factors' effects on faculty outcomes

After I built the final structural model, I conducted multi-group latent variable path analyses by gender, rank, discipline, and university, to see if any of the identified parameters (i.e., structural paths) differed across groups or were invariant. LVPA analyses were run using Mplus software. In the WLSMV difference testing across groups, a non-significant result indicated that constraining the parameter to be equal in both groups did not significantly worsen model fit, meaning that the parameter was not different in both groups. This allowed determining variability of effects among latent variables across groups by gender, rank, discipline, and university.

SEM group analyses did not reveal any existing differences in the structural links of key factors by gender, rank, discipline, and university. Non-significant chi-square test for difference testing indicated that constraining the effects of organizational factors and work-family balance on agency perspective, agency

behavior and key outcomes to be equal in both groups did not significantly worsen model fit. That is, women and men faculty, as well as faculty in STEM vs. in humanities and social sciences, and in both universities, did not differ in the effect of organizational factors and work-family balance on agency perspective, agency behavior and key outcomes.

Multiple Linear and Logistic Regression Results

In the overall regression models, work-family balance factor and organizational factors such as promotion procedures and workload distribution policies and practices were significant, positive predictors of agency perspectives, controlling for gender, rank, and discipline (Table 12). Type of institution did not have significant effects in any of the models and was not retained in the final models.

Specifically, the more satisfied faculty were with promotion procedures and workload distribution policies and practices in their departments, and the more they were satisfied with their work-family balance, the more agentic perspectives they developed (*Beta* = .312, *Beta* = .354, and *Beta* = .132, correspondingly). Also, faculty in STEM departments were more positive about their agency perspectives (*Beta* = .183), than faculty in social sciences and humanities.

As scores for agency perspectives rose, so did scores for agency behavior (*Beta* = .443), controlling for gender, rank, and discipline. Instructors were less likely than full professors to develop strong agentic behaviors (*Beta* = -.314). The stronger agentic behavior faculty developed, the more they were satisfied with their research productivity (*Beta* = .401) and their career (*Beta* = .468), controlling for gender, rank, and discipline. Assistant professors (*Beta* = -.523) and associate professors (*Beta* = -

.464) experienced less satisfaction with their research productivity than full professors. Instructors (*Beta* = -.257), assistant professors (*Beta* = -.518) and associate professors (*Beta* = -.309) were less satisfied with their career than full professors. The models predicted 47.3% of the variance (adjusted R^2) in agency perspectives, 24.1% in agency behavior, 21.5% in satisfaction with research productivity, and 34.1% in satisfaction with career (Table 12).

Finally, logistic regression analyses were performed to test the relationship between agency behavior and the likelihood of academic promotion or administrative leadership promotion. When controlling for gender, rank and discipline, stronger agentic behavior was found to increase the odds of self-reported academic promotion by 2.483 times (Table 13). Women faculty were 2.752 times more likely than men faculty (p=.048), and faculty in STEM were 4.017 times more likely than faculty social sciences and humanities (p = .004) to advance. With Nagelkerke R^2 =.276, the model explained 27.6% of the variance: $\chi^2(6)$= 34.353, p<.001.

However, stronger agentic behavior was not found to be a significant predictor of administrative leadership promotion. When controlling for other factors, assistant professors were 94.6% less likely than full professors (p = .004), and faculty in STEM were 3.598 times more likely than faculty in social sciences and humanities (p = .006) to get promoted to an administrative leadership position. With Nagelkerke R^2 =.248, the model explained 24.8% of the variance: $\chi^2(6)$=29.766, p<.001.

Conclusion

SEM path and regression analyses led to consistent results. SEM analysis confirmed that organizational factors of promotion procedures, collegiality, workload

distribution, and resources, along with a construct of work-family balance were positive significant predictors of agency perspectives. Agentic perspectives contributed to agentic behavior that influenced faculty outcomes such as satisfaction with research productivity and career, academic rank promotion and administrative leadership promotion.

Regression analyses, though, did not reveal significant effects of agency behavior on the likelihood of administrative leadership promotion. It is possible that, in contrast to SEM, regression analysis does not take into account the more complexed structure of the SEM model and, therefore, is not able to discern certain significant effects; or, the likelihood of an administrative leadership promotion is also influenced by variables not considered in the model. It could be that networks and connections play a greater role in leadership promotion than a strong agentic behavior. In fact, when I ran a logistic regression model of collegiality construct influencing leadership promotion, the model resulted in a statistically significant effect: strong collegiality almost doubled the likelihood of leadership promotion, i.e., increased by 1.896 times (p = .034).

Gender did not produce any significant effects except for increasing the likelihood of academic promotion for women faculty. This implies that regardless of gender, organizational factors and work-family balance are critically important for both men and women faculty in developing their sense of agency that determines their career outcomes. Surprisingly, women faculty were more likely than men faculty to be promoted in academic rank but less likely to be promoted to a leadership position. Women may have fewer or weaker networks and connections that help to

get to a leadership position. Women may also have less voice and recognition – qualities that guide the search for a candidate for such a position. They may also be less willing to pursue a leadership position if they have other stronger priorities, and the next chapter will uncover those.

Interestingly, agentic perspectives and the likelihood of academic promotion were stronger for faculty in STEM fields. However, as found in ANOVA analyses, STEM faculty were less likely than faculty in social sciences and humanities to feel stuck in their ability to advance in their career, and less likely to have concerns about opportunities for their academic progress. It is possible that the current emphasis on strengthening potential connections to industry and increasing opportunities for federal grants in STEM fields positively influences faculty perceptions of their work and their academic advancement.

Table 12. *Results from multiple linear regression models*

Variable	Agency Perspectives			Agency Behavior			Research Productivity			Career Satisfaction		
	Beta	SE	*p*-value	Beta	SE	*p*-value	Beta	SE	*p*-value	Beta	SE	*p*-value
Agency Perspectives	--	--	--	.443	.057	<.001	--	--	--	--	--	--
Agency Behavior	--	--	--	--	--	--	.401	.136	<.001	.468	.105	<.001
Promotion Procedures	.312	.075	<.001	--	--	--	--	--	--	--	--	--
Collegiality	-.019	.109	.813	--	--	--	--	--	--	--	--	--
Workload Distribution	.354	.090	<.001	--	--	--	--	--	--	--	--	--
Resources	.044	.071	.558	--	--	--	--	--	--	--	--	--
Work-Family Balance	.132	.059	.046	--	--	--	--	--	--	--	--	--
Women	.016	.129	.823	-.042	.118	.606	-.002	.218	.982	.059	.168	.433
Instructor	-.054	.388	.530	-.314	.355	.002	-.158	.678	.138	-.257	.524	.009
Assistant Professors	-.252	.273	.069	-.185	.252	.258	-.523	.465	.002	-.518	.360	.001
Associate Professors	-.210	.258	.138	-.157	.238	.348	-.464	.441	.007	-.309	.341	.048
STEM disciplines	.183	.125	.008	-.039	.119	.644	.078	.215	.348	.028	.166	.713
Adjusted R^2		.473			.241			.215			.341	

Note: Full professors are a reference group

Table 13. *Results from binary logistic regression models*

Variable	Academic Promotion				Administrative Leadership Promotion			
	Exp(B)	SE	Wald	*p-value*	Exp(B)	SE	Wald	*p-value*
Agency Behavior	2.483	.325	7.853	.005	1.093	.298	.089	.765
Women	2.752	.511	3.922	.048	.997	.463	.000	.995
Instructor	1.302	.142	.000	.999	.000	1.610	.000	.999
Assistant Professors	3.280	.152	.000	.999	.054	1.002	8.468	.004
Associate Professors	1.248	.148	.000	.999	.365	.839	1.438	.230
STEM disciplines	4.017	.488	8.127	.004	3.598	.469	7.468	.006

Chapter 5: Amplifying the Quantitative Variables

Interviews with faculty served as a rich contextual source of data that has helped to understand the nuances and cultural, historical, and economical specificities of the gender divide in academic culture of the two universities in Russia. While quantitative data presented interesting and sometimes unexpected results, the next section provides even a more surprising picture when going deeper into "how's" and "why's" behind the numbers. Nevertheless, in this study, qualitative data is complementary to quantitative data and, thus, this chapter follows the structure identified in the quantitative section. Interview data is presented as it pertains to specific variables and constructs in the statistical model and serves the goal of illuminating and interpreting the content and relations between the variables.

The interviews are not aggregated by university, even though it would be expected due to the original differentiation in major disciplines taught. The universities appeared to be more similar than different in how gender relations were enacted in their environment. Even though one originally started as a pedagogical institution later turning into a university with a broader array of fields, and the other focused on engineering and technical fields, they both have teaching component prevailing over research. They acted in a similar way over the last decade of higher education reforms in Russia. They competed for the status of national research institutions; however, they were not selected. As a result, the Ministry of Education made several attempts to merge the institutions to optimize resources. The attempts were abandoned unsuccessfully as the two opposing institutions refused to come to

agreement. Therefore, in spite of strengthening their research component, teaching remains the prevalent value in missions and workload in both institutions. The following section addresses the extent to which research is important in faculty workload. Teaching was historically considered as a female job. This makes women faculty experience similar issues in their work in the two institutions.

Table 14. *Interviewees' personal characteristics*

Name	Disciplinary Field	Age	Marital Status	Children
	Regional University			
Tamara	Physics	47	Married	2, adolescents
Anna	Physics	65	Divorced	2, adult children
Elena	Physics	31	Married	1, young child
Tatyana	Physics	58	Married	2, adult children
Olga	Mathematics	62	Single	1, adult child
Armina	Computer Science	27	Married	1, young child
Irina	Digital Media	43	Married	2, adolescents
Nadezhda	Communication	45	Married	1, adolescent
Aliya	Psychology	42	Divorced	1, primary school age
Eugenia	Languages and Literature	47	Single	
Nina	Languages and Literature	43	Married	1, primary school age
Zarina	Languages and Literature	38	Married	1, young child
	Technical University			
Maria	Engineering	35	Married	1, young child
Ksenia	Chemistry	42	Married	2, primary school age
Svetlana	Information Systems	56	Single	
Lidia	Engineering	62	Married	2, adult children
Valentina	Engineering	49	Divorced	2, adult children
Anastasia	Sociology	55	Married	2, adult children
Alyona	Linguistics	42	Married	2, primary school age
Lyudmila	Economics	46	Married	1, adolescent

Interviewees' Demographics

The table presents interviewees' demographics. All interviewees were women faculty members from lecturer to full professor ranks. Due to the larger size of

colleges in physics, engineering, and languages and literature, and snowball sampling procedures when interviewees recommended contacting their colleagues for interviews, larger numbers of faculty were included from these departments. Interviewees also included faculty from chemistry, mathematics, computer science, information systems, digital media, communication, psychology, sociology, economics, and linguistics. Most of the interviewees were married and/or had children (Table 14).

Professional Relations and Collegiality

Survey responses revealed that women were significantly more likely than men to receive helpful feedback from their department chair in support of their career advancement, and descriptively scored higher on most survey items dealing with collegiality and on academic rank promotion. Similarly to statistical analysis, interview data revealed high levels of satisfaction among women with collegiality in their departments. From the very beginning of the interviews, participants would say unanimously that they generally felt comfortable in their work environment and perceived support in their academic career progress. Anna, a divorced mother of two children, said, "I never felt discrimination, never had any issues related to being a woman. I also had a family, then got divorced and continued raising children alone. And I am an ambitious person, and I often was asked to be a chair or to take on a role of vice dean in academic affairs which I did accepted and spent many years in that position." Olga, a single mother and an associate professor in Mathematics, agreed, "In the beginning of my PhD study, my advisor passed away and I was not able to continue until a few years later. My daughter started school when I began to write my

dissertation. So it wasn't easy but I can't say I experienced any hurdles related to me as a woman." Olga also commented on the collegiality in her department, "Early in my career I tried working in a factory and I didn't like it … jealousy, gossiping …. On the opposite, we have a very supportive environment here." Tamara, an associate professor in Physics, felt very satisfied with the environment in her department, "I never had any concerns raised at work by my colleagues or was never told off for having children. I always felt support from my colleagues. We, women, are taken care of here."

Women were also significantly more likely than men to perceive support from their department in scheduling work commitments around family schedules. This fact was mentioned a few times by interviewees as well. Armina and Elena, young women in STEM fields with young children, appreciated their departments inquiring about the times that would be most convenient for them to teach. Armina said, "In the beginning of the semester they would first ask me what are my best times because they know I am the only woman with a very young child in the department, and children tend to get sick, we are starting daycare, etc. And I really appreciate it."

Mixed Gender Environment

Unanimously, in STEM and humanities and social sciences departments both men and women preferred to have a mixed gender group of colleagues. The reasoning for this preference, though, differed for men and women. Women often avoided working in women-only groups because they would find there a lot of gossiping that would negatively interfere with their work; while men enjoyed having women colleagues in their departments because women would make the atmosphere more

friendly, sociable, and clean. Olga, an associate professor in mathematics, shared, "As a student I worked at a factory in a female team and I didn't like it, there was too much gossiping. Here we have a well-balanced group in terms of gender and I enjoy the atmosphere." Tatyana, a professor in physics, noted: "You know, I worked and studied for a long time in a male environment and I feel that there are fewer problems for women in a male rather than in a female group probably because it is easier to work with men, probably because women are more emotional, they react to what someone else said or how someone looked at them. Men have a different behavior, they are more reserved". Eugenia, a department chair in languages, suggested, "When there is a man in the department, it has a positive influence, it brings more discipline."

Taking Women Seriously

Despite the friendly environment, though, women descriptively scored lower than men on survey items dealing with having a voice in decision-making in their department and recognition and value of their work by their colleagues. This pattern was further observed in the interviewees' responses. Some young women in STEM agreed that they experienced situations when they perceived bias from men colleagues. The men would not take them seriously as scholars. Armina, a young minority woman in Computer Science, told about her experience of being a single woman at a conference session, having her presentation at the very end of the session after the most matured professors and the younger men, and the reaction of men to her presentation, "When it was my turn to present I heard a subtle laugh, '… oh, there is a lady here, the beautiful half of humanity, what are you going to tell us … ,' and here I felt embarrassed."

Workload Distribution

According to the survey results, women were significantly less likely than men to perceive having the freedom to make choices in everyday work life and to choose courses to teach, as well as descriptively scoring lower on items dealing with freedom to design the syllabi for their courses and considering the process of teaching hours assignment as fair. Qualitative findings seemed at first contradictory to these quantitative results. Throughout the conversations I was able to reveal the instances that contributed to these discrepancies. Their status, age and experience mediated their ability to say no or their chance of being asked a favor by a senior colleague.

Interviewees generally agreed about workload distribution being fair, and their extra duties related to research or working with students. Interviewees rarely commented on experiencing pressure to undertake a role. Svetlana said, "Our chair first discusses with everyone their preferred courses." Irina, an associate professor in Digital Media, assured, "We all mostly teach courses for which we have developed content and what we have been teaching for years, what is related to our specialization." Olga, a professor in Mathematics, shared the experience of distributing work with students in her college:

> Years ago we had a person among faculty designated to guide a group of students, a curator. He or she would involve them into cultural life as well. They would listen to students' personal problems, attend conferences with their students, go on extracurricular tours and events, mentor them, check on their living conditions in their student dorms. Now we don't have this mentorship anymore. There is a program now, run by a specific unit within our college, for first year students where they can get help as they adapt to the new environment.

Saying 'No'

Respondents generally reported feeling comfortable to say "no" to requests from their colleagues. However, when going further into examples, it was surprising to discern the conditions mediating their feeling of confidence. Elena, a lecturer in Physics and a mother of a very young child, who was trying to devote more time to her dissertation and move to an assistant professor level, was concerned about the amount of paperwork requests and the lack of power to decline these requests, "It is not always easy, though, to say no to such requests. You have to have the experience in the department to understand who and what requests you can decline." Tatyana, a full professor in Physics, who spent many years in her department, observed that some women were not able to reject requests, "Yes, I noticed that some women do not feel easy saying no and it does have an impact eventually on their voice and career. I remember a young woman who wasn't satisfied and felt burdened and unable to change it and she finally left." Their reaction to these requests would depend on their rank level and years of experience. The beginning of an academic career including lecturer and assistant professor levels, was the most stressful period for women faculty. As soon as they advanced to associate and full professor ranks, they began to feel much more confident, empowered, protected and respected.

Who is Taken Care of?

Tamara, an associate professor in physics, noted that there were only two women in their department and they felt respected and taken care of. On the opposite side, an interesting observation occurred in many interviews with women working in humanities and social science departments where the proportion of men is generally

low. In those departments men tend to be "taken care of" since they were represented in very small numbers, oftentimes one or two men per department. In some cases they were given more hours than women for which they would get paid more and the rationale behind this was based on their role as the main bread winner for their families or due to their financial difficulties such as taking a mortgage. Eugenia, a department chair in languages and literature, recalled, "Our dean [woman], would always tried to give men in our college some extra work so that they would get paid more." This distribution of work was seen as unfair by some women. Aliya, a single mother and associate professor in psychology, commented on a situation in her department:

> It is not always transparent and clear how the workload is distributed among us. It is assumed that as a man he is responsible for his family but nobody asked me if I, as a single mother, would want to have more work as well, to provide for my children. It does lead to anger and deteriorates collegiality at times when the workload is getting smaller and everyone is anxious about the amount [of workload] they receive. In the end, I had to look for one more job to get enough income for my family.

In other cases, some men did not get to do the administrative paperwork for their courses. They would seek help of departmental administrative assistants, saying that the assistants were much more efficient with this work and they themselves did not know how to do it. In STEM departments, men full professors would ask their assistant professors or lecturers, who are typically young women, to do the work and would praise them on their excellent capacity to perform these types of work. Elena, a young lecturer in a Physics department, observed, "My advisor tends to leave all his paperwork to me. He keeps saying he admires how I am putting it into such a perfect shape in such a short time. But now I am trying to minimize the amount of this type of work because in the end it began to interfere with the time I need to complete my

dissertation to secure an associate professor position. These days you have to move to the associate level in a timely manner to secure your job in university."

Eugenia also noticed that, among professors, they can sometimes treat their students differently based on gender, "Some professors, both men and women, as I know, may favor male students and be nitpicking with female students." However, as noted by Eugenia, in many departments, faculty felt resentment not because of gender issues but due to the changes occurring in the *optimization* process that implied higher workloads and faculty cuts, "Administration terminates contracts with faculty at lower ranks even though these could be very experienced people who spent their life in this institution, and their gender doesn't matter."

Research Productivity

Descriptively, women scored lower than men on survey items related to their research productivity. However, lower scores for women on another survey item, "I wish I had more time to spend on research", may imply that women are not generally interested in getting involved more in research. They valued their research productivity to the extent necessitated by their university regulations, i.e., advancing to associate level and, thus, staying in academia, but they might not be motivated beyond these lines because it meant sacrificing their family time and time to earn additional income. Research productivity was also found to be dependent on the field. In STEM fields and in the Technical University, where demands for research were stronger and opportunities more present, survey respondents were more likely to spend time on research and to be satisfied with their research productivity. A similar trend was traced in interviewees' responses in the fields of physics and engineering.

Research vs. Teaching

Engaging in research was critical during the first years to advance to associate level to secure their job. While there is no tenure phenomenon in Russia academia, being an assistant professor presents a serious risk of being dismissed during the time of resource *optimization* and personnel cuts. As soon as they advanced to the associate professor level, though, they lost all motivation to move further. They complained about going for a full professor rank being too expensive, time-consuming, and not financially or in any way rewarding.

Working in a teaching institution does not imply working less hard than in a research-oriented institution. Low salary pushes faculty to find second or third jobs such as teaching extra overload classes at evenings or weekends, teaching at other institutions, or tutoring.

Given the insurmountable workload of teaching hours in their main position and the extra jobs made it impossible for them to be productive in research. They often found themselves having to choose whether to publish a paper or to earn extra money to contribute to their family budget, and they chose the second. The research production was encouraged in their institutions and departments but was not demanded as critical to retaining their position after promotion to associate level.

The requirements for academic promotion to associate and full professor ranks were not criticized by interviewees. They agreed that these requirements are fair and clear. The time and the opportunity to advance for women were not criticized by women themselves. They believed the requirements were fair despite gender and it totally depended on the woman whether she could advance and how long it took her.

It was understood that a woman would take longer to advance because of her family needs. It was not seen as problematic. She generally did not blame the system for this inequity. She firmly believed it was her choice and her decision that were guided by her values.

Male heads of departments and deans did not push women for faster promotion either, recognizing that a woman would always have a primary role as a mother. This attitude was double sided. On the one hand, it was presented as a supportive gesture. On the other hand, female colleagues were often perceived as less serious and competent by their male colleagues, especially in STEM fields.

The gender division by field began in school. However, the interviewees did not believe this division was shaped by a school which imposed its values about what a male job and a female job are. They would pause to think on the resulting distribution of women and men faculty in STEM vs. humanities and social sciences, but then they would say that it was guided by personal choice, depending on what the person was interested in, and not by their teachers, mentors, parents or the norms accepted in the society in general.

Anna, an associate professor in Physics, recalled an example from her school and college experience:

> I made a big progress in history, chemistry, and physics at school. No, teachers did not motivate students to go into a specific field because of their gender. Later when I was in college I had a professor who strongly believed that girls cannot be as good in physics as boys. He would typically have a couple of favorite male students and would often ask their opinion on different problems in physics and made it obvious that these students were ahead of the class. And many times where these selected students didn't know the answer or gave wrong answers, he would address the rest of the class and I would always answer correctly. And once after the class he asked me, "You probably feel treated unfair. I wanted to make an exception and offer you to write thesis

> in physics but then I found out that you're also involved in a group in philosophy with an A professor and she said she doesn't want to give you away to anybody."

This suggests he had a very high view of her as a student, even though he used to consider female students not as capable as male students.

Work-Family Balance

Survey results showed that women were significantly less likely than men to be satisfied with their work-family balance. Specifically, women reported that they are responsible for family chores to a greater extent than their partners, and that their family commitments impede their career advancement. Via the interviews, however, I found out that, despite the high levels of dissatisfaction with this aspect of their lives, women value and prioritize their family and children over their work.

Family Comes First

A Russian woman most often puts family in the first place, and even when she does not find support from her partner, she chooses to have children, raise them alone, and keep the job, as many interviewees did. Whether they were married or single, they opted to have children and prioritized their children's needs over their own professional needs. This decision, inspired by cultural values, defined career choices for most interviewees. Most interviewed women noted that a Russian woman would always naturally choose to have a family rather than making outstanding progress in her career without having a family. Family also always implied having children. Anna, a divorced mother of two children, gave an example of her priorities, "I was often asked to be a chair or to take on a role of vice dean in academic affairs

which I eventually did accepted and spent many years in that position … but it took place when my children grew up and graduated from universities, so my career did not interfere with my family needs." Valentina, a single mother and a scholar who attracted many grants in engineering, provided a detailed and sharp illustration of sacrifices she made along her career for the wellbeing of her children:

> I was offered opportunities to participate in long-term international programs for faculty … but at that time I had a 12-year old son and a 15-year old daughter and I couldn't leave them alone. Their education and communication with them shifted my fulfilment in research to the second place. I tried to devote every opportunity to research when I had time but that was during time periods free from my family needs. I would not do research at the expense to my family. I never prioritized money, career, or exciting internships or conferences over my children's needs. I couldn't risk my children to make career progress.

Lidia, a full professor in Engineering, reflected on her decision to prioritize her family over her work:

> I really enjoy my work and tried always to be involved in research but to the extent that was allowed by my children's needs. Yes, I think it is typical for women in Russia. And men … most of them devote much less time to child rearing than women. So I think it is a general trend in Russia. However, it also depends on personal characteristics of a woman. I know women who don't have a family. Of course they can devote time only to work and research. When I look at publications, though, I can't say I am lagging behind on the numbers.

Tamara, a professor in physics and a mother of two, affirmed, "Maternity for women in Russia always was and still is in the first place. In Germany, I noticed men walking with their kids and women making their careers. However, I think we have this trend starting here, too. Young women in Russia do not seek to make a family now." Tatyana, a professor in physics, commented, "When a woman decides to engage more in work and research, she is risking to end up being single, or she has to find a man who would accept the way she is and be able to help."

The fact of choosing family over career was observed in many interviewees' life experiences. They took their jobs seriously and made every effort to make progress in their work but to the extent that their family obligations allowed. At the same time, while women valued their family, the extent to which they were all willing to sacrifice their careers varied. Zarina, a mother of a young child, acknowledged being torn between her aspirations for professional development and her husband making his point obvious about doing her work not at the expense of their family.

"The Man is the Head, but the Woman is the Neck"

Armina, a young minority woman with a young child and a lecturer in Computer Science, shared her perspective on the status of women in Russia. She was originally from a small country that used to be a part of USSR, a country that had strong cultural norms and traditions generally different from the current Russian culture. A woman in her culture was expected to get married and stay home, taking care of the family and the children. A woman having a job was looked down upon. However, her own family instilled in her an understanding that, while having a family is important and family comes first, a woman should also have education and a job to feel secure and not entirely dependent on her husband.

She perceived Russian women as being much more independent though than women in her own culture. From her point of view, women in Russia are very diverse in how they want to see their status in the society and their families. There are energetic and strong women, who have their own businesses, take leadership roles in companies, raise their children alone, things that are not accepted in her society. She gave an example of a woman professor in economics who decided to start a new

department focusing on areas that she was interested in and invited faculty to work in her new team, including men faculty, and all of this she did while having family and children.

In her own case, Armina was satisfied with the help she received from her husband and her family to take care of the baby. She, as many other interviewees, referred to a concept of "the man being the head, and the woman being the neck", meaning that, at home a wise wife was able to rule her husband in a way he would not realize that she talked him into taking his decision. In other words, she was the hidden head of the family. She explained, "If you openly ask something or explain that an A option is not going to work because of B and C, he would do the opposite … he would intentionally chose the A option because he wants to take *his* decision. So you have to adapt and try making him believe that your decision was his decision." Tatyana, a professor in physics, also raised this point in the interview: "We know that women are thought of being more as a neck and men as a head."

Nevertheless, Armina thought she was not as organized and focused on her research at this moment because the baby was taking all of her time, but she was confident that her child was her priority at this moment. She was not feeling pushed or demanded by her supervisor and the department head to advance faster and was grateful for their understanding of her current priorities.

A Helping Hand?

Seeing a husband as helping his wife do her work at home and not as an equal partner sharing their common responsibilities, was found to be very common among men and women in Russia. A woman was often raised with an idea that seeing to

home and family needs was her primary role. However, many interviewees recognized that in most cases the woman decided how to position herself and "raise" her partner from the beginning of the family.

Dealing with Work-Family Tension

Increasing teaching workload, financial need for additional work in the form of tutoring, family and children needs, all of this contributes to an immense tension that women academics experience in their lives. While academic teaching hours can be flexible, women often found a lack of time to take care of their younger children, to meet them from school, bring them to afterschool extracurricular activities, or spend time with them in the evenings or weekends. Some women commented on having an understanding and supportive husband who can make arrangements at work, pick up children from school, feed them, and stay with them in the evenings or weekends. Others admitted that their husbands are not able to be that flexible or are reluctant to take on too many responsibilities at home, and in these situations women are lucky if they have their mother or mother-in-law to help. While government-funded daycare centers and kindergartens play an indispensable role in dual earner families, childcare responsibilities put tremendous pressure on a woman who is working full time.

Anna, an associate professor in Physics and a divorced mother of two children, shared her experience of dealing with the stress, "I was very active in research projects, conferences, etc. in the beginning. I was travelling a lot for these reasons. But then I had my first child. It was quite late and I couldn't afford to devote the same amount of time to my research. I also had an uneasy pregnancy with my

second child and had to take longer time from work. My mother and my husband helped me out at times." Tamara, a professor in physics and a mother of two, asserted, "Of course, women have less time left for their work and research after their family needs, especially in Russia." However, Tatyana, a professor in physics, noted, "I know many men who are willing to support women. I think it depends on their [men] upbringing and education. Also, it depends on how the woman positions herself in the very beginning when starting a family."

Furthermore, on the one hand, an increasing deficit of childcare centers forced some women faculty to extend their maternal leave and stay at home with their children, thus, risking their jobs and career development. Beginning in the 1950s the Soviet government created a network of free public childcare centers all over the country. Almost all children attended these institutions full-time starting as early as two months, 1.5 year old – the end of a paid parental leave, or at three years old – the end of unpaid parental leave. During the economic crisis and a decline in birth rate of the 1990s, many of these centers were handed over to other organizations. Years later, when the national government set priorities for increasing the birth rate in the country and designed programs for young families to have a second child, local governments encountered an immense shortage of kindergartens. Since 2000s, the local authorities have been unable to satisfy increasing needs of dual-earner families in childcare. As a result, only approximately 60% of eligible age children in the country are currently attending childcare centers. Many families are forced to search for private childcare which is not well-developed yet and is not affordable for many, or women have to

stay at home for an extended period of time, risking their jobs and career development.

On the other hand, some young women faculty were hesitant of taking a maternal leave prior to advancing to associate professor level due to their fear of being fired during personnel cuts.

Agency Perspectives and Behavior

Despite the feeling of support and perceived collegiality, women descriptively scored lower than men on survey items related to their agency perspectives and behavior, such as having control over advancement in their career, being strategic in achieving their career goals, and being in control of the time they spend on work vs. their family chores. This observation may imply that, for Russian women, responsibilities at home outweigh the support provided at work and eventually have a stronger influence on their career satisfaction. This section further unpacks how women faculty interviewees developed agency perspectives and behavior to deal with the work-family tension.

Self-fulfillment

A common observation raised by interviewees was that a woman can fulfil herself in different roles and work is not necessarily the only one. Some women find their fulfilment in their family and children. Others may engage in self-employment jobs from doing handmade things to cooking, sewing, or starting small daycare private centers. Women who pursue academic careers find their self-fulfillment

within teaching, working with students or doing research. Nevertheless, for very few of them their work may outweigh their family.

Tatyana, a professor in physics, said, "Women can find their fulfillment in other things, such as home, gardening, etc. For men it is more difficult. Even mortality is higher for men when they retire. They often find themselves lost when they leave their job, while retired women will find something to be keep them busy. They would help out with grandchildren, engage in some club, begin Nordic walking, etc." Lidia, a professor in engineering, commented, "Men are tuned to do one job. Women find time to manage different things."

Learning from History

Following World War II, when the country experienced a dramatic decline in male population, Russian women were left alone to take care of family and children, and participate in the country's economy. Women were pervasively employed in factories, agriculture, etc. It was natural to see women in almost every field and all kinds of jobs.

As was noted in chapter 1 and referred to by the interviewees, economic instability, high rates of unemployment, increased crime rate during the 1990s after the demise of the USSR, contributed even more to changing roles of men and women. The 1990s saw a rapid increase in divorce rates and numbers of single mothers. In all of the historical cataclysms that happened in the country, a woman was always stronger psychologically than a man, making efforts to survive and support her family. It could be that seeing children as her first and primary purpose in life gives to a Russian woman the strength to resist and keep going in order to provide for her

children. Placing family first, however, does not mean choosing to be a stay-at-home mother. The decision to work is driven by two factors, economic situation and personal aspiration for independence.

First, the national economic instability results in a need for both partners in a family to work. Extended maternal leave and a public system of daycare and schooling enables women to have jobs and be mothers. For many years a stay-at-home mother would be perceived negatively in the society, especially during Soviet times when a person without a job was labeled as lazy. Later these attitudes have changed and today it is up to the person when choosing whether to work; some women prefer to stay at home to devote their time to their family, but only if they are free to make this choice from a financial perspective, i.e., if the husband alone is able to provide for the family.

However, there comes a second reason, personal independence. Even though a husband is assumed to the bread winner and when his income is enough to provide for the family, the woman would still prefer to have a job which could be full- or part-time, or flexible. Having a job gives her confidence and subconsciously ensures her rights and voice in the family. Having a degree and a job protects her in unexpected situations in life when she may find herself alone or a single mother with children to raise.

Women show their stamina during the times of economic defaults when men tend to give up. Women are shown to be more flexible and adaptive to the changing environment. They do not refuse to go for a job that is lower in rank and salary than

what they used to have, if this is the only opportunity available to support their family. In similar situations, men suffer from a damaged dignity and fall in prestige.

Tatyana, a professor in physics, had a similar point of view, “This is a difficult question … but I think women can accomplish a goal everywhere if they are determined, especially Russian women. You know the saying, ‘A Russian woman would stop a running horse and rush in a burning house,’ [laughed].”

Switching Roles

As many interviewees mentioned, there is a new growing trend in society as a whole of switching gender roles for economic reasons. It is becoming more acceptable for a man to take a parental leave or a sick leave with their children, when a woman earns more and when taking a leave by a woman would incur greater financial loss to the family budget.

Nevertheless, this new phenomenon is not accepted by everyone yet, because it puts a greater pressure on gender roles and relationships in the family. Not every man is willing to sacrifice his feeling of importance as a bread winner and head of the family. Not every woman is willing to acquire the leading role and risk to burden herself with not only household duties such as cooking, cleaning and taking care of children, but also with financial stress. The acceptance of these changing roles depends on the values of both partners, the role of career for the woman, and the willingness of the man to take on household duties and child rearing which are a priori considered as female obligations.

This new trend is not happening in academia, though. Men faculty are not eager to take parental or sick leaves. Anna, an associate professor in Physics and a

mother of two, commented, “No, men in our departments do not take parental or sick leaves with their kids [laugh]. They can take (as women, too) one-year academic leave to complete their dissertation or other research projects but with kids … no.”

A Good Daughter

Russian women in academia tend to overload themselves not only with extra teaching hours, but also in the other roles and situations they faces every day at work. As a teacher working with students she feels compelled to help students when they have personal issues. They, in turn, find it more comfortable to share their problems and concerns with a woman teacher rather than a man. As a leader or supervisor she also tends to help her colleagues. As a result, it brings a feeling of usefulness and satisfaction of doing good to a person or contributing to the common good. An interviewee suggested that these characteristics subconsciously stem from the childhood, when girls are encouraged to be good daughters and help their mothers.

Another interesting observation was made about development of personal characteristics being dependent on the parent with whom the daughter has the stronger connection. If she is drawn to her father, she would grow career oriented and ambitious. If she has stronger ties with her mother, these qualities go to the second place. Possibly, it also depends on which of the parents is more career- or family-oriented.

Burning Out

Having extra jobs and engaging in tutoring are mostly performed by women. First, parents find women teachers as more suitable for this type of activity because

teaching is predominantly a female field and a woman teacher is perceived through the lens of her maternal core as more caring and attentive and better able to explain things to a student. Second, a woman in Russian society tends to search for ways to earn extra income and overload herself with all the opportunities she can find. A rare man would find himself running from one student to another after a day of work. Men are assumed to make extra money by taking on leading roles within departments, colleges, or universities, and thus they are more often asked to undertake these responsibilities. Since men also end up having more time for research than women, they are offered positions of vice dean or vice rector for research more often than women.

Lyudmila, an associate professor in Economics, noted her constant stress due to overload and lack of time, "We (women) usually run like a hamster in a wheel. We tend to overload ourselves with work and home duties and in the end we suffer from emotional burnout. It could be that we, women, are not able to evaluate the risks adequately. Men might be more realistic in weighing the inputs and outputs before undertaking a task." Anastasia, an associate professor in Sociology, though, commented on her husband's impulsive action of buying a car that was too expensive for their budget, "His reasoning was that he just wanted this car and I tried but couldn't dissuade him from this unnecessary waste of money. Now we have to pay for it. I also have two adult sons. You know it is so difficult at times to function at home with three grown up men and have a voice."

Administrative Leadership

Although not significantly different, survey results showed that women faculty scored lower on administrative leadership items such as willingness to pursue a leadership position and having leadership qualities. Fewer women than men reported being promoted to an administrative leadership position. The section below uncovers the reasons discussed in the interviews why women faculty are reluctant to taking a leadership role.

A Man in a Skirt

Most interviewees agreed that ambitious women exist but in fewer numbers than men. Tamara, an associate professor in Physics and a very active researcher with a solid experience working in her department, was not interested, though, in taking a leadership role, "We are only two women in our department but we feel respected and taken care of. They offered us multiple times to take the chair's position but I just didn't want it. It's their toys. We let them play." Lidia, a professor in engineering, noted, "Women tend to act more as a doer, an executor. She would first go to her boss to agree on changes before implementing them. Men would do as *they* see it necessary and then they may confirm it with their supervisor." Eugenia, a single woman who has been a department head for a long time, reflected on the issue, "Having an administrative leadership role requires a lot of time and oftentimes as a woman you have to choose between this role and having a family. Also, many men prefer to see a man as a leader in their group. They don't like seeing a woman as their leader." Olga, a professor in mathematics, recalled an example, "I noticed that any time when our department chair is away he asks our young male associate professor

to be an interim chair, even though we have a female professor who is more experienced and has served in many roles in our college."

Nadezhda, a professor and chair in communication, commented on the behavior of men leaders and perception of women leaders by men, "I noticed among people in mathematics … their dean is very demanding … he may go and check himself if classes start on time and check on you. And when attending university senate committees I could see that men are quite negative to women in leadership as if women are not naturally capable of doing it, even towards the woman rector." Svetlana had similar impression about treatment of women leaders by men in university committees, "Criticism is coming more often from men, while women tend to ask questions as if suggesting an optional solution to an issue. Men, on the opposite, can be very sharp and critical."

However, there are women who are willing to pursue leadership roles. Currently, the rector of one of the case study institutions is a woman who was selected for this position for the second time, and includes women serving as deans and chairs. However, most of the other upper level administration positions are taken by men. Eugenia commented on this situation, "Of course it is easier for men to take these positions. Our current rector is a single woman, and when voting people probably thought she would have more time to devote to her administrative duties than if she had a family. She then built up her team of vice rectors, and the team has only one woman."

Some respondents believe that the behavior of women in these positions depends on the women themselves. In some cases, they retain their feminine values

and behavior. But in others, they begin to acquire masculine characteristics. Feminine behavior is commonly associated with support, softer critique, ability to listen, to provide constructive feedback, and to offer potential solutions. As a leader she would be more demanding, more controlling and less emotional to conform to her authoritative role. Men leaders, especially younger men, and women leaders with masculine characteristics tend to be highly critical and rough. These masculine characteristics of a woman leader contributed to a concept of 'a man in a skirt'.

Conclusion

This chapter presented results from interview data that complemented quantitative models of organizational factors, agency perspectives and behavior and faculty outcomes. Agency perspectives and behavior were found to evolve based on the field of study and percent of men in the department. Expected differences between the two institutions were mitigated by the prevalent teaching nature of both universities. However, within institutions, the more masculine the field was, i.e., purely theoretical, technical, hard science, or engineering, and the more men were in the department, the more masculine a woman's behavior was in either institution.

It was surprising to find that experienced women faculty with an established career in their field refused to take leadership positions in their department. They explained it by saying they were not interested in these roles. I suggest several possible reasons for this behavior. It is possible that they perceived these roles as being important for their male colleagues and they did not feel comfortable changing the relationships within their department when most of their colleagues were men. No matter how good a woman leader is, men did not generally like being subordinate to a

woman. Second, these positions may come with a substantial increase in workload and responsibilities. If women already had a higher teaching load than their male colleagues, they would not want to overload themselves to the extent of a burnout. Finally, they were cautious about not pursuing roles that might burden them with time-consuming, less rewarded, household type of work within the department.

Since research component was not emphasized in the institutions' practices, faculty spent less time on research and experienced less stress and related gender inequalities in these two institutions compared to faculty in research-oriented institutions. As time was found to be critical to women's lives due to the double burden of family and work, less time spent on research could have contributed to the fact that interviewed women generally reported a higher level of overall satisfaction with their work and fewer instances of gender discrimination than would be expected. Nevertheless, when going deeper into details of their experiences, I was able to discern instances of hidden discrimination that may not be recognized by the women, or that they intentionally or subconsciously refuse to acknowledge. They would instead pretend they did not perceive these situations as unfair to them as women, or they would intentionally leave them unnoticed and would keep doing their jobs. The latter reaction was possibly a strategy they developed to adjust to the environment and find their niche.

Chapter 6: Discussion and Conclusion

This chapter discusses key findings for research questions and connects the findings to the literature on women faculty, agency and Russian context. I also outline implications for practice and future research. Since very limited literature exists on women academics and their agency in Russia, I had to refer to the literature on faculty agency and gender issues in universities from the United States and Europe, primarily the latter.

The findings for this study demonstrate that certain organizational factors influence faculty agency and faculty outcomes such as academic rank promotion and leadership opportunities, research productivity and overall satisfaction with their careers. Organizational factors of professional relations, workload distribution and promotion procedures exerted a positive influence on agency perspective that, in turn, positively influenced agency behavior. The findings from this Russian study are consistent with U.S. literature on the role of institutional contexts in faculty experiences (Bode, 1999; Hagedorn, 1994; Johnsrud, 2002; Lease, 1999; Huston, Norman & Ambrose, 2007; Neumann, 2009). The findings from the structural model corroborate a proposition that organizational constructs influence agentic behavior via agentic perspectives (Campbell & O'Meara, 2011). Work-family balance was also found to have a strong positive effect on agency. The interview data, though, revealed that the stress that is later discussed in this chapter and experienced by interviewees was not related to organizational factors but mostly to work-family balance that was found to be largely dependent on a woman's ability to position herself in her family and to negotiate home responsibilities with her partner. This finding suggests

differentiating two broader categories of agency, *professional agency* and *personal agency*. Professional agency is shaped by a woman's strong confidence in her capacity in professional fulfillment and can take multiple forms in certain areas of their professional life such as agency in academic promotion, agency in administrative leadership, or agency in research visibility, productivity and publishing, agency in teaching, agency in developing collegial relationships, etc. Personal agency reflects a woman's confidence to build relationships in her family that help her manage multiple roles in her personal and professional life. Women may feel agency in certain areas of their personal life as a parent and wife, i.e. agency in having a voice in her family in situations of decision-making, agency in articulating her needs and priorities, agency in distributing responsibilities among family members, and agency in balancing work and family. Personal agency, therefore, has a strong mediating effect on professional agency perspectives and behavior and work satisfaction.

Women in the two institutions were generally very satisfied with their collegiality to approximately the same extent as men, a finding that contradicts research on U.S. institutions showing women being less satisfied than men with the collegiality in their institutions (Bode, 1999; Neumann, 2009; Trower & Chait, 2002). A surprising observation, though, from both quantitative and qualitative sources of data, was that women were substantially more likely than men to perceive support from their departments in scheduling work commitments around family schedules. It indicates the respect for women's role as a mother and their related duties that require time and flexible schedule. On the other hand, men are not always expected to devote

as much time to their family needs as women, and this emphasizes the gendered structure of family commitments. Another perplexing finding was the lack of voice and recognition for women and their inability to say no, especially younger women at the beginning of their careers.

Satisfaction with work-family balance was crucial to women's success at work. During the Soviet time, the government created a support system for women. However, the system was not to liberate a woman but rather to ensure her contribution to the workforce equal to men (Sperling, 1999). For instance, a nationwide network of public free child care centers, and a maternity leave for up to three years – the longest in the world – all secured woman's role as a mother and a worker. This governmental assistance served to internalize women's role and solidify the labor separation for men and women. The opportunity to join the labor market and contribute to the economy was not accompanied with an opportunity to share home responsibilities. Since then, the facilities have not changed, and the differentiation of roles for men and women have remained rooted in Russian society for decades (Ashwin & Isupova, 2018). Within this environment, women learned to feel comfortable and find their place for self-fulfillment. Even though women do not show a high level of satisfaction, it is enough for a peaceful existence.

By means of avoiding confrontation, not speaking out or openly showing their dissatisfaction, women faculty are not being passive. Instead, they seem to gain more by acting quietly and firmly. Whether related to teaching schedule, research focus or service workload distribution, they would not give up immediately on their efforts to negotiate their intentions with their chair or colleagues. They would persist, keep

going and look for alternative solutions. Reluctance to behave actively could be an instance of a Soviet and Russian mentality feature originating from the historical and political past. The long-term period of oppression when people were deprived of their voices and punished for their efforts to articulate their needs, their opinions and their ideas, inevitably resulted in people's increased cautiousness. A saying "initiative is punishable" remains a strong idea among the Russian population and permeates all aspects of people's lives.

In family life, a manifestation of this silent resistance to discrimination is the "head and neck" concept identified by many interviewees. The concept implies that women are the true but disguised leaders in their families, i.e., the man is the head but the woman is the neck meaning that she is in control of what directions the head is turning. Since men believe that they are the leaders, they want to take their own decisions and they tend to subconsciously reject any openly raised concern or suggestion from their wives. Therefore, women learn to lead the conversation in a way that helps men to come to the decision that women initially wanted them to take. This strategy helps both sides to come to mutual agreement and leaves them satisfied. While this approach is commonly present in their family relationships, it is to a certain extent salient in communication with their colleagues. Rather than entering a conflict situation, women faculty are more likely to find ways to gently but steadily and confidently reach their goals. Nevertheless, consciously or subconsciously they recognize their limitations created by the institutional and societal system and prefer to find their niche within these constraints by undertaking roles and responsibilities that fit their values and priorities.

There is plenty of evidence coming from U.S. research on academics struggling with work-life balance (Lester & Sallee, 2009; Sallee, 2014; Ward & Wolf-Wendel, 2012). While over the past years many universities in the United States and some European countries have developed departmental and institutional policies and programs of support for faculty to balance their work and family life (Hollenshead et al, 2005; Lester & Sallee, 2009; Manchester, Leslie & Kramer, 2010; Quinn, 2010), there are absolutely no such programs at the level of department and institution in Russian universities, especially for women. The absence of these policies and programs is driven by the idea of gender equality established in the country decades ago that leads to neglecting issues experienced by women, including the double burden of work and family and the lack of time women devote to research that is critical to their promotion and retention. The only remaining support is the governmental provision of maternal leave and a network of state funded childcare. Both programs are certainly indispensable in ensuring the capacity of women to have a family and to work. Consequently, this support has two opposite effects. First, it creates opportunities for women to work to contribute financially to their family budget and for their self-fulfillment in other roles outside their family. Second, as this support is given mostly to women, it reinforces the primary role of a woman as a mother in Russian society.

With the shift of the country's development from a social to a neoliberal paradigm since the 1990s, the economic reasoning began to dominate relationships, distribution of chores and decision-making in the family. While not being common yet, there is an emerging trend of men choosing to take parental or sick leaves with

their children when their wives earn more. This trend is not evident yet in universities, and further research involving men faculty to explore their perceptions and experiences is needed. Women faculty are primarily married with have children as they progress through their career. Women tend to take maternal leave (up to 1.5 year) before or after they get promoted to associate professor. However, lately the leave policy became not as secure as it used to be and an administration may terminate contracts with women on maternal leave. There is no such phenomenon in Russia as tenure. All faculty continue to be employed on a contract of 1 to 3 years that is extended throughout their careers. As a result, women assistant professors and those full professors who are close to retiring age are more insecure. Women associate professors appear to be the most satisfied category as they have made enough academic progress to secure their jobs and spent enough time in their departments to attain recognition, respect and authority, and to have voice. Faculty agency in U.S. universities has been found to be greater overall with promotion in rank (Campbell & O'Meara, 2013). From this perspective, women associate professors in Russia seem to enjoy more freedom in their work and more control over their time and workload, than women at mid-career in many other countries (Jaschik, 2012).

Despite the significantly higher level of dissatisfaction with work-family balance for women compared to men, women in the two universities have been shown to be generally satisfied with their academic careers primarily because they place their family first. Women in Russia are generally reported being satisfied with their work to the comparable level of men or even more satisfied than men

(Poplavskaya & Soboloeva, 2017). This finding emerges in contrast with significantly lower levels of career satisfaction experienced by women academics in research institutions in other countries (Ecklund and Lincoln, 2011).

At the same time, similar to women academics all over the world, and as I expected to find, women faculty in these two universities feel significantly more likely to be burdened with family work and child care than men faculty. Women have been shown to typically perform more work in the home and have disproportionate responsibilities for child-care (Misra et al., 2011; Colbeck, 2006; Mason & Goulden 2002). Family life has a different impact on men and women. Women feel that they are responsible for family chores to a greater extent than their partners. For women, working at a teaching-oriented institution can provide flexibility in managing family-work life. They may schedule their family duties around their teaching schedules to drop off and pick up children at daycare and school and take sick leaves when needed instead of having a fixed nine-to-five schedule. Since the amount of time spent on research and therefore research outcomes are not as critical as in a research-oriented institution, women in these two institutions feel generally highly satisfied with their work because it provides them with opportunities for self-fulfillment and family-work life balance.

Faculty numbers have decreased over the recent years due to administration efforts to reduce expenses. While teaching workloads have increased tremendously in the era of education reforms, most faculty decide to teach overtime because of low salaries. Women faculty are mostly involved in extra teaching and tutoring, while men faculty tend to take positions of leadership and research. Women faculty seem to

be satisfied with the gender division of labor in their departments and college. Since the two universities have not been selected for governmental grants to attain the status of research universities, the research component is not as emphasized as if it would be in a research university. However, the gendered research division has certain implications for women's academic progress. The universities have recently introduced an "effective contract", a program that counts annual faculty achievements such as their rank, number of publications, citation ranking, participation in research projects and grants, patents, etc. and financially rewards faculty for the points earned. The launch of this program indicates a growing interest of universities in their faculty's research outputs and therefore an increasing demand for faculty to move up in academic rank, publish, apply for grants and to organize and participate in conferences. Moreover, promotion to associate and full professor ranks implies more security, and to get promoted faculty are required to produce a number of publications and, thus, to be engaged in research work. As women are loaded with teaching and administrative work and experience a double burden of family and work to a greater extent than men, they find less time for research and therefore take a longer time to get promoted to associate level. As found via survey analysis, women spent significantly less time on research per week than men.

An interesting observation that occurred in the interview process presents a contradiction between women faculty overall satisfaction with their career and their feelings of stress. Feeling unable to successfully balance their work and family leads to stress and burnout. The organizational factors included in the survey such as promotion procedures, collegiality, or workload distribution were not found in the

interviews to be related to the stress. In fact, women faculty were generally very satisfied with these areas and on some survey items were significantly more likely to be satisfied than men. First, the interviewees raised concerns about insurmountable course-related paper workload that required a vast amount of time that faculty had to spend at home by taking from their family time. The paper workload has dramatically increased recently when the ministry of education began continuously revising the existing educational standards, thus, requiring faculty to update their course programs and plans. This requirement was viewed as useless and time consuming, and, as a result, led to increasing dissatisfaction with educational reforms and their impact on faculty work. Given the focus of this study, I did not interview men, and, therefore, I could not compare men's perceptions of the growing paper load to perceptions of women. However, from the interviews with women I could trace a tendency among men to transfer their paperwork to departmental administrative assistants or younger women lecturers.

Second, another concern raised by interviewees was related to overloading themselves with roles in situations faced every day at work. In their desire to help others, colleagues and students, driven by their internalized feeling of a good daughter and a caring mother, and by a satisfaction of contributing to the common good, women faculty tend to take on too many responsibilities that consume their time. The ingrained aspiration to being helpful restrains their ability to say no to requests coming from their colleagues, administrators and students. Consequently, similar to findings on women faculty experiences in universities in other countries (Misra et al., 2009), women in the two case study institutions agreed about being

burdened with high administrative load of work and in many cases inability to decline requests for such work. As a result of overwhelming administrative work, women faculty feel they have no ability to balance work and family life satisfactorily. It induces resentment, regrets, burnout and stress (Elliot, 2003; Hamilton et al, 2006; Lerner, 2010).

Finally, having a strong personality makes women undertake many opportunities such as extra jobs or tutoring needed for their family budget because they believe they can accomplish them all. At the same time, if they find themselves unable to delegate their home responsibilities among their family members, i.e., not having *personal agency*, in the end they suffer from overload in their work and in their family that leads to emotional burnout. Therefore, having a supportive partner and being capable of negotiating their family duties becomes vital in ensuring women faculty satisfaction with her work-family balance and ultimately her career satisfaction.

While representation of women faculty is not a problem in Russia, and the percent of women faculty in the two institutions is substantially higher than in institutions in other countries, women take longer and experience more hurdles in their progression through career and advancement to leadership roles such as department chairs, deans, or vice rectors. Men are more likely to be encouraged and supported for those positions, and they are "taken care of" and "favored" by their department chairs and deans. Besides, due to gaps in time when taking maternal leave it becomes not as quick and easy for women to get back to work and research, while men in academia still do not tend to take parental or sick leaves with their children.

For men, being married is more of a benefit than an obstacle for their careers. However, gendered expectations within departments can inhibit a father's opportunities to take advantage of parental leave and take needed time for family (Sallee, 2012). Given the scope of the study, I did not interview men faculty, and exploring their perception of gender division of labor within their family and at work could potentially be a next step for future research. Women are also more likely to be asked to engage in departmental household-like roles and responsibilities that require more time and are less prestigious. In this sense, service distribution in Russian universities resembles a gendered division of labor within universities in other countries that results in women spending more time in teaching and service than their male counterparts (Winslow, 2010).

Through the process of survey data analysis, I had to remove several survey items from the final model due to low responses, as well as their low CFA loadings and non-significant SEM results. These items included: "I have experienced a situation in my work where my gender played a role", and "I had situations in my work where I experienced gender prejudices", "I am willing to pursue a leadership position", "I have leadership qualities", "I wish I had more time to spend on research", "My family commitments had an impact on my career considerations", "In my family, I am responsible for family chores to a greater extent than my partner". Although not fitting the model, these items provide an important context and will be discussed here. Via responses to open-ended questions, both men and women faculty conveyed an idea that gender did not play a role in their field of study. They argued that the most critical conditions for being successful in profession and research is

time and passion. The fact that they identified time as critical to professional success but very few related time to gender, suggests that most faculty, both men and women, do not question the existing structure and role distribution where women bear the larger portion of family responsibilities and the time required for this family role goes unnoticed.

While not being statistically significant, women scored lower than men on items related to leadership. Interview data provided an insight into possible reasoning of women not being interested in leadership positions. First, they viewed these roles as time-consuming and not enough financially rewarding. Due to extensive amount of time required for certain positions, women oftentimes have to choose between this role and having a family. Second, in some situations they prefer not to compete with men who might be considered for the same positions. With regard to research component of faculty work, both survey and interview data showed that, given the lack of time and the lack of incentives for engaging in research, women faculty were not very interested in spending time on research. Their family and financial needs outweighed their interest in research. The difference in interest in research was more salient based on the field of study, i.e., STEM vs. social sciences and humanities. In STEM fields, where faculty have more opportunities for grants and connections with industry, faculty were more positive about their research involvement.

Finally, survey analysis revealed that women were significantly more likely than men to feel that they were responsible for family chores to a greater extent than their partner. This survey item was consistent with an item from work-family balance construct, '*My family commitments impede my career advancement'*, where women

scored significantly higher than men as well. Considering these two items together suggests that women are spending much more time than men on their family responsibilities and this has a direct negative effect on their career. This leads us back to the personal agency that is critical to women's professional agency, self-fulfillment and career satisfaction.

In the rising era of resource optimization, efficiency, and academic capitalism in Russia beginning in the late 2000s, faculty are pushed to act market-like, e.g. to design products to sell, propose courses, apply for grants from the government, and build connections with business and industry, with an overall goal of developing new sources of financial support for sustainability (Slaughter & Leslie, 2001; Beverungen, Dunne & Sorensen, 2008; Berglund, 2008). Currently, a larger number of grants and potential connections with industry are open to faculty working in STEM fields than in social sciences and humanities. Faculty in the latter fields of study are struggling to find grant opportunities or develop marketable products and courses. As a result, STEM faculty find themselves being significantly more satisfied with their work, time spent on research and research productivity. Given that men are presented in greater numbers among faculty in STEM fields, we can expect over time to see a gender effect of perpetuating gender differences in universities at intersections of research, field of study and financial outcomes (O'Hagan et al., 2016).

Conclusion

The study attempts to uncover the experiences of women faculty in Russian universities. The application of structural model investigating the effects of organizational contexts and family-work balance on faculty sense of agency and

faculty outcomes enables us to identify critical aspects in faculty work and family environments and to build connections between the constructs that contribute to women's satisfaction with their work.

While findings from qualitative data sources corroborate statistical conclusions, they also vividly depict a diversity of opinions, perceptions and experiences. Interviewees portray a Russian woman as being strong and able to build relationships in her family in such a way as to have support for career, i.e., they view themselves as being agentic because it allows them to accomplish the two critically important goals, i.e., of having a family and self-fulfillment. At the same time, the intention to manage multiple responsibilities with lack of support and authority leads to stress and burnout.

The political and social past of Russia is drastically different from many other developed countries and manifests itself in distinct societal norms, accepted behaviors, and expectations, including roles of men and women (Buckley, 1989; Engel, 1987; Pushkareva, 1997). Furthermore, the transition to a market economy has had multiple diverse effects on men's and women's roles in the society, and switching gender roles in the family due to economic incentives (Muravyeva & Novikova, 2014; Sillaste, 2014; Kabaikina & Sushchenko, 2017). Unsurprisingly, university environments reflect these larger transformations in the society.

The fact of a complete absence of university and department policies, programs, and organizational practices to address issues experienced by women faculty indicates neglect on the part of educational organizations to care about the well-being of their faculty. In this time of increasing demands and fast-paced

environments, institutions should recognize the problems and pay more attention to faculty satisfaction and contexts for facilitating career progress. Learning from other institutions and emulating best practices may help to create spaces for faculty to reflect, share concerns, problematize issues faced in their work, and explore solutions.

Implications for Practice

In this final section, I offer a few recommendations with regard to what actions Russian universities might consider in light of the findings of this study. First, I draw recommendations that address findings from the quantitative part of my study. Next, I proceed with recommendations emanating from the qualitative findings, and, finally, I conclude with propositions derived from the issues that emerged in both chapters.

As regression analysis showed, promotion procedures and workload distribution policies and practices had a significant positive effect on agency perspectives development. While women were more likely than men to report receiving career advancement support from their department chair, descriptively women scored lower on perceiving promotion process and requirements as clear and fair. This indicates a need for inclusive discussion of promotion process and requirements at the departmental and institutional levels, and for making them open and easily available. The support from their chair has shown to substantially increase women faculty academic promotion rates. Therefore, chairs should commit to continuing these efforts and to creating opportunities for communication with their faculty about their academic promotion.

Since women were shown to be less satisfied with workload distribution aspects, specific recommendations may include making the procedures for teaching hours assignment in their departments more clear and transparent, and engaging faculty into open conversations about a range of courses to teach and choose from.

Previous research (O'Meara, Lennartz, Kuvaeva, Jaeger, & Misra, 2019) has shown that equitable department work practices and conditions have a strong, significant and positive impact on women satisfaction with their work, on their perception of fairness in the distribution of teaching and service work in their department, and on faculty outcomes, and have a significant negative impact on their intent to leave. Equitable department work practices and conditions may include creation of greater transparency with regard to information about faculty work activities for all department faculty to see (e.g., number of advisees, committees, size of classes, compensation for key roles, and faculty workload); developing organizational practices such as planned rotations of time intensive administrative roles; and building reward and credit systems that allow faculty doing more than their share in one area to receive credit to do less in another area (O'Meara et al., 2019).

One of the evident gender differences was women faculty low satisfaction with their research productivity. Department chairs should think about potential underlying reasons for these perceptions, involve women to discuss their concerns, and design a strategy to address them. Reasons could include a lack of time for research due to paperwork burden, requests from other faculty and students, teaching load, perceived value or visibility of their research, scarcity of resources required for conducting their research, etc.

In the light of the changing landscape of Russian higher education, as evident in the universities' strategic plans, the two institutions under study have strived for and continue making efforts for attaining a status of national research universities. In the future, achieving the status has several important implications for women faculty. Stressing research as a major area for support and development inevitably emphasizes masculine characteristics in the work environment. Competition for research recognition and resources, grants and high level publications require substantial amount of time spent on research, time that women are often unlikely to have or reluctant to spent on research when being burdened with teaching, administrative responsibilities, work with students, and family chores. First and foremost, university leaders should officially recognize the different starting points for men and women faculty in an institution with a change in priorities in research vs. teaching, and develop practices, resources and networks that will support women faculty and facilitate their integration in the research environment to the extent of men.

Several important recommendations have to be made based on the findings derived from the qualitative chapter. First, women in STEM fields, particularly early in their career, would often perceive bias from their men colleagues and realize that they are not taken seriously. Also, these women were not always feeling easy to decline service requests from their more matured men professors or department chair that in the end negatively affected their time that would otherwise be devoted to their research need for promotion or their family, and lead to anxiety and stress. The power to transform these perspectives of men within the department resides with the department chair who should set an example and be critical about tasks he and other

faculty members are asking women faculty to help with. Institutions could organize workshops to help women faculty develop stronger perspectives, confidence, and behavior and communication strategies. However, not only young women faculty in STEM felt nervous about saying ‘no’ to service requests. Women in social sciences and humanities reflected that they tend to overload themselves not only with extra jobs but also with smaller things to help others. They were raised as good daughters with an idea of helping those in need and contributing to the common good. Departments and institutions could develop mentor programs and encourage meetings to help them navigate their priorities and enhance their negotiation skills with their colleagues and students.

Second, relying on their own and their colleagues’ experience, interviewees raised concerns about their rights for maternal leave and security of their jobs. In reality, the opportunities and conditions for parental leave in reality are not as appealing as they appear on paper. . Currently, young women faculty in the beginning of their career are hesitant of taking a parental leave before they advance to associate professor level. Universities were able to find loops in the federal law to fire women faculty during their maternal leave period at instructor and assistant professor ranks. Administration leaders should acknowledge the importance of maintaining and protecting their employees’ rights that were provided and secured in the constitution over a century ago, in 1917, i.e., the right for a paid parental leave. Compared to many other countries, where this right has been adopted through numerous continued and painful efforts or has not been achieved yet, it tends to be taken for granted in Russia these days. Employers are often reluctant to hire young women due to

expected economic expenses related to their maternal leaves and hiring a temporary person to substitute the woman on a maternal leave. Modernization, competition, market-driven policies and reduction of federal budget expenditures impelled higher education institutions in Russia to follow the national guidelines for optimization of resources. For many institutions this implied personnel cuts, including faculty. Primarily, the cuts impacted faculty who were close to their retirement age and young faculty prior to associate level. The fear of losing their job leads to stress among women faculty and they choose to resign or postpone their family planning. Therefore, this current institutional strategy is neither serving the purpose of retaining the most talented and committed faculty nor creating a healthy climate for faculty work and development. As a result of these actions, many interviewees pointed out that their departments are facing an alarming shortage of young faculty and are concerned with their near future when in just about ten years they will not have the next generation of faculty to take over and ensure continuity of their work. Consequently, it is critically important for institutions to recognize the needs of their faculty and to commit to ensuring a positive work-family environment that will benefit institutional long-term outcomes.

Also, many interviewees noted that, incentivized by economic reasons, young men now tend to take parental leave and sick leaves with their children instead of their wives. Surprisingly, this phenomenon has not taken place in academia yet. Therefore, men faculty should be encouraged by departments and institutions to utilize these opportunities without negative consequences for their career. These actions would help to develop critical approaches to women's issues at workplace,

when a parental leave is no longer a prerogative of women, and family responsibilities are shifted. Studies found that encouraging men and women to use parental leave in equal numbers can have a transformative effect on sharing parental roles (Lester & Sallee, 2009; Lundquist, Misra, & O'Meara, 2012; Sallee & Hart, 2015). Those male academic partners who take parental leave later stay substantially more involved in child-care and household chores related to childcare than male partners who do not take parental leave.

Third, a number of women faculty referred to an increasing deficit of childcare centers that forced them or their colleagues to extend their maternal leave and stay at home with their children, thus, risking their jobs and career development. Given their status of federal public institutions, universities should adhere to national priorities and engage in collaboration with the local authorities to provide their faculty with childcare facilities.

Fourth, institutions should recognize the negative impact of increased administrative paperwork on their faculty productivity and work satisfaction, and should engage in searching for ways to mitigate this impact. Women faculty also reported experiencing this burden to a greater extent than men, and oftentimes this burden reduced their time to teaching, research, and family. Potential options may include making administrative paperwork guidelines clear and transparent, and, when possible, assigning this work or part of it to departmental administrative assistants.

Both chapters revealed that the most staggering gender differences and feelings of concern evolved from work-family balance. Women faculty recognized that they were spending significantly more of their time on their family commitments

than their partners, and that these commitments impeded their career advancement. However, they also tend to choose their family over their career. Most of their departments respected their priorities and provided sufficient support for scheduling their work around their family needs. Therefore, the recommendation is to maintain this approach to women's needs within the departments that are practicing it, and to foster it within those departments that are yet to recognize its importance.

Recognizing and problematizing women faculty issues such as unequal distribution of workload and increased administrative paperwork, lack of clarity and fairness for promotion procedures, low satisfaction with research productivity, feeling uncomfortable declining service requests and having to prove their proficiency in the field, and higher burden of childcare needs, is the first and essential step at the institutional and departmental levels to ensuring that women's voices are heard and their personal and professional challenges are addressed. It should be openly and officially acknowledged that these issues exist and it is acceptable to talk about them. Specific actions could include officially including these issues into departmental agenda and institutional strategic plans, creating a committee to advocate for women's rights at workplace, and offering opportunities for mentoring, networks and workshops to provide women with space for sharing their experiences, listening to each other, exchanging perspectives, finding solutions, enhancing communication skills, and developing agentic perspectives and behaviors. The survey results implied that women are more responsive than men to programs and resources designed to support professional development and achievements. This is consistent with research that suggests that women are more likely to value such characteristics of their work as

their schedule, responsibilities, and work environment (Poplavskaya & Soboleva, 2017). Therefore, encouraging initiatives for network building are likely to be beneficial for women faculty satisfaction with their work environment and to contribute to their agency development.

To synthesize the most important recommendations for future practice in universities in Russia, I categorized them into individual, organizational and societal levels, using O'Meara, Campbell, and Terosky (2011) faculty agency framework (Table 15).

Last but not least, it is important that men are to be included in the process. As the study found, having a supportive partner plays a critical role in women's personal agency. The issues of concern to women should not be discussed within women's circles only but involve men in an open conversation. Similarly, networks, mentoring programs and workshops should not be targeted at women only but include men, as through the interaction process both men and women develop awareness and learn to sympathize, communicate and negotiate.

Finally, the suggested recommendations could be implemented via mimetic and normative processes of isomorphism (DiMaggio & Powell, 1983). There are plenty of examples from universities in other countries that produced positive results and that universities in Russia could learn from and apply depending on what fits most their context and needs. Faculty themselves should be recognized by the institutions as active participants and leaders of the process for change.

Table 15. *Recommendations by level*

Individual	Organizational	Societal
• Mentoring • Peer networks • Chairs' commitment to creating space for communication with faculty about academic promotion • Create space and meetings to help women navigate their priorities, discuss their concerns (e.g., regarding research involvement), design strategies to address them, enhance their negotiation skills with their colleagues and students, etc.	• Recognizing and problematizing women faculty issues and including these aspects into departmental agenda and institutional strategic plans • Job security • Reform of promotion policy to make them open and easily available • Inclusive discussion of promotion process and requirements • More clear and transparent workload assignment • Develop planned rotations of time intensive administrative roles • Build reward and credit systems that allow faculty doing more than their share in one area to receive credit to do less in another area • Workshops to help women faculty develop stronger perspectives, confidence, and behavior and communication strategies • Encouraging men to use parental leave • Develop more efficient approaches to administrative paperwork • Respect parents' needs and provide sufficient support for scheduling their work around their family needs • Create a committee to advocate for women's rights at workplace	• Provision of daycare centers • Security of parental leave policies and practices

Appendix A. Survey Instrument

As part of a doctoral dissertation research conducted at the University of Maryland, USA, we seek assistance for all faculty in your institution. We are assessing specific aspects of faculty work experiences in Udmurt State University and Izhevsk State Technical University. Some of the items were developed from a Faculty Work Environment Survey conducted at the University of Maryland by the ADVANCE office.

Your input is critical and greatly appreciated. Your participation in this confidential survey is strictly voluntary. Refusal to participate will not affect your employment in any way. The survey will only take about 10 minutes of your time to complete. All information and responses will be kept strictly confidential. Data gathered from the survey will be summarized and presented in aggregate form so that no single individual can be identified.

Participation in this study does not involve any known physical, financial, emotional or legal risk to you. You are welcome to contact Alexandra Kuvaeva at any time if you have questions about the survey at akuvaeva@umd.edu.

By selecting "yes" below and then proceeding with the survey you are voluntarily consenting to participate in the survey and allowing your responses to be used for research and evaluation purposes.

☐Yes, I voluntarily agree to participate in this survey and allow my responses to be used for research and evaluation purposes.

☐No, I do not wish to participate in this survey.

Career Development

Please indicate the extent to which you agree or disagree with the following statements about your career advancement:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have control over advancement in my career.	1	2	3	4	5

I have been strategic in achieving my career goals.	1	2	3	4	5
I feel stuck in my ability to advance in my career.	1	2	3	4	5
During the past five years, I have been encouraged or received help from my colleagues or other faculty in my university to support my career advancement or pursue a leadership position.	1	2	3	4	5
I received helpful feedback from my department chair in support of my career advancement.	1	2	3	4	5
In my department, the promotion requirements are clear.	1	2	3	4	5
In my department, the promotion process is fair.	1	2	3	4	5
I am satisfied with my career.	1	2	3	4	5
I have concerns about opportunities for my academic progress.	1	2	3	4	5
I am willing to pursue a leadership position.	1	2	3	4	5
I have leadership qualities.	1	2	3	4	5

I have concerns about my opportunities to advance:

- ☐ YES (Please explain _____)
- ☐ NO

I got promoted in academic rank during the past five years/ I am positive that I will get promoted in the next five years:

- ☐ YES
- ☐ NO

I had in the past five years/have/received an offer to take an administrative leadership position:

- ☐ YES
- ☐ NO

Professional Relationships

Please indicate the extent to which you agree or disagree with these statements about professional relationships and mentoring:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I received help from my colleagues or other faculty on campus to support my academic work.	1	2	3	4	5
I provided help to another faculty member in my department or institution.	1	2	3	4	5
I am satisfied with the collegiality in my department.	1	2	3	4	5
I feel isolated in my department.	1	2	3	4	5
I have a voice in decision-making in my department.	1	2	3	4	5
My work is recognized and valued by my colleagues.	1	2	3	4	5

Teaching and Research Workload

Please indicate the extent to which you agree or disagree with the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have the freedom to choose what courses I teach**.**	1	2	3	4	5
I have the freedom to design the syllabi for the courses I teach.	1	2	3	4	5
The process of teaching hours assignment in my department is fair.	1	2	3	4	5
I am satisfied with the amount of time I spend on teaching.	1	2	3	4	5

I have the freedom to choose what research areas I focus on.	1	2	3	4	5
Research is a substantial part of my work.	1	2	3	4	5
I am satisfied with my research productivity.	1	2	3	4	5
I wish I had more time to spend on research.	1	2	3	4	5

Please indicate the **number of hours per week** you spent on

Teaching _____
Research _____
Student advising _____
Administrative work _____
Other_____

Resources and Programs

Please indicate the extent to which you agree or disagree with the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am satisfied with my salary.	1	2	3	4	5
In my department and university professional achievements are encouraged (projects, grants, participation in workshops, seminars, etc.)	1	2	3	4	5
In my department and university we have programs/resources to support and attract young faculty.	1	2	3	4	5
I do work that is meaningful to me.	1	2	3	4	5
I have freedom to make choices in my everyday work life.	1	2	3	4	5

When I experience difficulties or obstacles in my career, I keep going and I believe I can succeed.	1	2	3	4	5
I have experienced a situation in my work where my gender played a role.	1	2	3	4	5
I had situations in my work where I experienced gender prejudices.	1	2	3	4	5

Overall, I believe gender plays a role in my discipline:

- ☐ YES
- ☐ NO

Please explain _____

Work-Family Balance

Please indicate the extent to which you agree or disagree with the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am in control of the time I spend on work vs. my family chores.	1	2	3	4	5
My family commitments had an impact on my career considerations.	1	2	3	4	5
My family commitments impede my career advancement.	1	2	3	4	5
My department supports faculty scheduling work commitments around family schedules.	1	2	3	4	5
In my family, I am responsible for family chores to a greater extent than my partner.	1	2	3	4	5

I am satisfied with the amount of time I spend on family commitments.	1	2	3	4	5

All information that you provide will be kept strictly confidential. All reports will be presented in aggregate form so that no individual can be identified.

Your discipline:
- ☐ Humanities/ Social Sciences
- ☐ STEM Sciences

Your current title is:
- ☐ Instructor
- ☐ Assistant professor
- ☐ Associate professor
- ☐ Full professor
- ☐ Other (Please explain)_____

What is your gender?
- ☐ Man
- ☐ Woman

What is your current marital status?
- ☐ Married
- ☐ Divorced
- ☐ Widowed
- ☐ Single
- ☐ Other

How many children (minor, i.e. under 18 years old) do you have? _____

How many hours per day do you spend on child care and/or domestic chores?
- ☐ Less than an hour
- ☐ 1-2 hours
- ☐ 3-4 hours
- ☐ 5-6 hours
- ☐ 7 hours or more

Thank you for participating in this survey!

Appendix B. Interview Protocol

I. Policies and Practices

1. Can you tell me why you decided to become a faculty member? How you decided to work here at this institution?
2. As you progressed in your career, have you faced any challenges? Do you think any of those challenges were impacted by your gender? Can you think of a specific challenge? What was your reaction? What perspectives did you adopt to overcome the difficulties? What was your thinking? Can you think of personal qualities that helped you in this process?
3. As you progressed in your career, were there any policies, programs or initiatives in your department or university that provided support? Were any targeted specifically at women faculty? Such as faculty development program for women?
4. Do you think it is fundamentally different to be a male or female faculty member? And in terms of opportunities and constraints – if so, how? What role do you believe your gender plays in your faculty career, discipline and institution? Have you ever experienced discrimination?

II. Career Advancement

1. Can you tell me about your last promotion process? Was it straightforward or anxiety producing? Why?
2. Do you think you will apply for promotion again? If so, when? Why? Has your promotion process experience impacted your intention to apply or not to apply for promotion again?

III. Professional Relationships

i. Networks

1. Could you tell me about networks (groups, connections) you are/have been involved in formally or informally within your department, university or discipline? Can you think of the role that gender plays in those networks or groups?
2. Are there any solidarity groups of women (working on women's issues, promotion, etc.) in your university? Could you tell more about their work and impact, and your participation?

ii. Mentoring

1. Have you mentored or provided help informally through communication to a junior faculty member?
2. Have you been mentored/received help from your colleague, department chair or university administrator (which can include sharing information about projects and grants, connecting to other people, etc.)? Could you share your experience? Do you think gender played a role in the relationship?

IV. Teaching, Research and Administrative Work

i. Could you tell me about the workload management process in your department?

1. Do you feel that the process of teaching hours assignment is fair?

2. Do you have the freedom to choose what courses you teach, what research areas you focus on, and what department, college or university administrative work you are involved in?
3. How much freedom do you have in managing the time you commit to teaching, advising, research, and administrative work?
4. Do you volunteer or are you asked to participate in administrative work?
5. Do you think you are involved in any of these areas of your work to a greater extent than other colleagues in your department?
6. To what extent you can tell that you are in charge of the syllabi for the courses you teach, compared to other colleagues in your department?

ii. Do you have opportunities to participate in research projects?

1. Do you wish you had more or less of this?
2. If you are one of the few female faculty members in the joint projects, do you feel comfortable?
3. Have any issues come up in the process? What was your reaction and how did you resolve it?

iii. Do you have opportunities to undertake rewarded university administrative work?

1. Who asks you to do the administrative work? Do you volunteer?
2. Do you see any benefits of doing administrative work?

3. Have you observed any gender differences in types of administrative work performed by men and women (men taking or being asked to do a more prestigious administrative work/activity/role)?
4. Have you tried to say no, if you did not want to participate? Why would you not want to participate in administrative work?

V. Work-Family Balance

1. Could you tell me a little about how family responsibilities are shared in your family?
2. Do you feel you are in control of the time you spend on your work vs. family chores and child care?
3. Did your family obligations have an impact on your career considerations?

VI. Overall, are you satisfied with your work and your career? Please explain.

VII. Is there anything you would like to share that we have not discussed today?

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